PORTFOLIO

OF

DERMOCHROMES

BY

PROFESSOR JACOBI
Of Freiburg im Breisgau.

English Adaptation of Text

BY

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WITH 243 COLOURED, 2 BLACK AND WHITE ILLUSTRATIONS ON 132 PLATES, AND 12 PHOTOMICROGRAPHS OF PARASITIC FUNGI.

THIRD REVISED AND ENLARGED EDITION.

VOL. I.

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DEDICATED

TO

GEHEIMRATH PROFESSOR ALBERT NEISSER

OF BRESLAU.

Editor's Preface to the Third English Edition.

This new edition of Professor Jacobi's Atlas contains practically all the old plates and text embodied in the two former editions and in the Supplement—published in 1906—but rearranged and considerably augmented.

Ten entirely new plates, with appended articles, have been added, and, in several instances, more satisfactory illustrations have been substituted for previously published ones. The text has been subjected to scrupulous supervision, involving considerable modification, and, whenever necessary, some amplification.

By kind permission of Professor Jacobi twelve photomicrographs of the commoner parasitic fungi causing diseases of the skin have also been added, along with some briefly explanatory text. For English-speaking nations such illustrations are, indeed, a matter of practical necessity, as microscopical examination is requisite for the diagnosis of the affections in question, many of which occur with especial frequency in Great Britain and her Colonies. The fact is worthy of accentuation that the methods of preparation employed are perfectly simple and within the capability of even the busiest of practitioners.

For the use of these photomicrographs I desire

to express my warmest gratitude to my friends Dr. Arthur Whitfield and Dr. H. G. Adamson.

The fact that editions of the work have appeared, not only in the original German, but also in the English, French, Italian, Spanish and Russian languages, testifies to its widely acknowledged worth, utility, and success.

In the preparation of this edition, Professor Jacobi warmly acknowledges his indebtedness to his former collaborators, as well as to his assistant, Dr. Lever; to the printing firms of Greiner and Pfeiffer in Stuttgart and Christopher Reisser Sons in Vienna, whose artistic efforts have attained such happy results; and especially to his publishers, Messrs. Urban and Schwarzenberg for their invaluable and unremitting services.

J. J. Pringle.

London,
May, 1910.

Preface to the First English Edition.

THE process employed in the production of the illustrations in the following work is that known as CITOCHROMY, and is the invention of Dr. Albert of Munich. The reproduction of colours by this process is believed to be more perfect than by any other hitherto in use, and is obtained almost entirely by mechanical means apart from manual work.

The great majority of the illustrations are taken from models in the Breslau Clinic, executed by Herr Kröner, and are reproduced by kind permission of Professor Neisser, to whom the inception of the work is mainly due, and to whom it is dedicated by his former pupil and assistant, Professor Jacobi.

Thanks are also due to Professors Lesser and C. Lassar of Berlin, Dr. Bayet of Brussels, and Dr. Henning of Vienna, for permission to make use of models in their possession.

Acknowledgment must also be made of the services rendered by the gentlemen who executed the various models utilized—viz., Herr Kröner of Breslau, Herr Kolbow and Herr Kasten of Berlin, Mons. Baretta and Mons. Tramond of Paris. A few of the models have also been made by Professor Jacobi himself after the method devised by Mr. Cathcart of Edinburgh.

The object of the Atlas is not to illustrate the rarer

forms of skin disease, but to furnish to medical men, teachers and students a handy and comprehensive series of illustrations of the skin affections most frequently met with in practice, in their various phases and at a reasonable price within the reach of all.

As no attempt has been made to supplement the necessary systematic treatises on diseases of the skin, the text has been condensed to the greatest possible degree, without, however, omitting any of the essential facts.

J. J. PRINGLE.

LONDON.

Editor's Preface to the Second Edition.

THE early and gratifying demand for a second edition of this work testifies to its utility.

Two new plates, with text, have been added, viz.: Plate XVIa, Fig. 28a (*Scrofulodermia*) and Fig. 29a (*Tuberculide*); also Plate LXXVIII., Fig. 141a (*Syphilis circinata*) and Fig. 142a (*Paronychia syphilitica*). Both plates are taken from models in the collection of Professor Neisser, to whom the renewed thanks of the Editor are gratefully acknowledged.

The following figures have been substituted for those which appeared in the first edition, viz.: Plate LIX., Fig. 109; Plate LXXI., Fig. 129; and Plate LXXXII., Fig. 149.

It is hoped that these additions and alterations will enhance the value of the atlas, the price of which remains unchanged.

J. J. PRINGLE.

LONDON.

Editor's Preface to Supplement to the Second Edition.

THE publication of a Supplement to Professor Jacobi's work has been prompted principally by the urgent request of numerous professional friends to fill in certain lacunæ in the existing work, so as to render it a practically complete pictorial Atlas of Diseases of the Skin.

To these friends Professor Jacobi desires to express his indebtedness. The Supplement contains seventy-six new dermochromes, many of which depict syphilitic manifestations, the importance of which is universally admitted. But several non-syphilitic diseases not hitherto illustrated are also included, some of which—*e.g.*, Darier's disease, Myiasis linearis—are regarded in most text-books as extreme rarities. This opinion Professor Jacobi does not share, and the translator endorses the author's view.

Numerous types or phases of common skin affections not delineated in the work have also been added, and cannot fail to conduce to its increased practical utility both to the student and practitioner.

Especial thanks must again be expressed to Professor Neisser of Breslau, who has placed his entire

wealth of material at the author's disposal. A deep debt of gratitude is also due to Professor von Bergmann, Professor Lassar, Dr. Max Joseph, Dr. Buschke, Dr. Heubner, and Professor Greef, of Berlin; to Professor Schlossmann and Dr. Werther of Dresden; to Dr. Henning and Professor Finger of Vienna; to Professor Pospelow of Moscow; and to Professors Fournier and Jullien of Paris, all of whom have permitted models in their possession to be utilized. Due recognition must also be acknowledged to the kindly and energetic assistance of Professor Jacobi's former assistant, Dr. von Linck, and to Messrs. Baretta, Jumelin, Kolbow, Kröner, Kasten, Fiweisky, and Johnsen, who are responsible for the models from which the dermochromes have been executed under the direct and special supervision of Dr. Albert of Munich, with whom rests the credit of first devising and carrying out the method of delineation employed throughout the work with such brilliant success and gratifying results.

J. J. Pringle.

London, 1906.

Erythema Exsudativum Multiforme.

Plates I., II., Figs. 1, 2, 3, 4.

Erythema Multiforme is a skin disease which occurs as part of a general infective malady—especially in spring and autumn—in which macules, papules, vesicles or bullæ develop in a few days on typical seats of predilection, especially on the backs of the hands and feet, and extensor surfaces of the fore-arms and legs; it often also appears on the face and other parts of the body, but only in exceptionally severe cases on the palms and soles. Thus, macular and papular erythema (Fig. 3) occur, becoming annular or gyrate (Figs. 1, 2)—when involution of the patches takes place in their centre—or vesicular (Fig. 4). The cause is unknown.

The colour is bright red in the most infiltrated marginal parts, but livid in the centre, which is frequently sunken, especially in cases of old standing and on the lower extremities. The disease is polymorphous, as different degrees of exudation may be present at the same time. If ring-shaped papules or circles of vesicles in concentric circles are present the affection is called *Erythema iris* or *Herpes iris* (a bad name). As the disease progresses the papules soften and pale without scaling, vesicles dry up, and, if no relapses occur—as they are apt to do—the whole

process runs its course in a few weeks. Some participation of the joints is not infrequently observed. Implication of internal organs cannot as a rule be laid to the charge of the erythema. On the other hand, toxic erythemata occur in internal disorders, which ought not to be considered as identical with true erythema multiforme.

Diagnosis can be easily established in typical cases from the acute onset, the general phenomena, the absence of subjective symptoms—apart from slight burning sensations—and the recovery without desquamation. The somewhat similar syphilide is different in colour, and usually occurs in different localizations; eczemas weep and itch; the occasionally similar urticarial eruptions are much more ephemeral. Ringworm, which may also occur in concentric forms, is scaly, and never presents the same typical distribution.

Prognosis is thoroughly favourable.

Treatment.—As the disease is a general one and joint affections are often present, salicylate of soda in doses of 30 to 60 grains daily, or similar preparations, are generally prescribed. When there is much burning, compresses of a 1 per cent. solution of acetate of aluminium may be locally applied; if blebs form, the alcohol spray may be recommended.

Figs. 1, 2. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 3. Model in Neisser's Clinic in Breslau (Kröner).
Fig. 4. Model in Neisser's Clinic in Breslau (Kröner). A repeatedly recurrent vesicular eruption in a tailoress, twenty-five years of age, with high fever and joint symptoms.

No. 1. 2. Erythema multiforme.

No. 3. 4. Erythema multiforme.

Erythema Nodosum.

Plate III., Fig. 5.

Occasionally associated with Erythema multiforme, but generally alone, there appear nodules as large as a hazel-nut or walnut, with special frequency on the fronts of the legs, but sometimes also on other parts, accompanied by pains and swelling of the joints, which give the impression of a bruise (*E. contusiforme*), and disappear in two or three weeks. The affection is most probably of infective character. The colour, which is at first bright red, goes gradually through the whole grade of tints which occur in blood pigment undergoing absorption. Complications with diseases of internal organs, especially endocarditis, sometimes occur, as well as hæmorrhage into mucous membranes.

The **Diagnosis** may be made without difficulty from the localization and colour of the lesions. Bruises seldom appear in such large numbers and in the same position, while they are generally accompanied by epithelial erosions. Multiple gummata develop insidiously, are different in colour, and tend to necrose.

The Erythema induratum of Bazin, which affects the same localization, is an eminently chronic disease.

The **Prognosis** is favourable in uncomplicated cases, but it must be guarded in presence of endocarditis.

The **Treatment** consists of rest in bed and the administration of salicylic preparations.

Fig. 5. Model in Lesser's Clinic in Berlin (Kolbow). Woman, thirty-six years old, without joint symptoms, treated as an out-patient.

No. 5. Erythema nodosum.

No. 6. Purpura haemorrhagica.

Purpura Hæmorrhagica.

Plate III., Fig. 6. Plate IV., Fig. 7.

Under the name of Purpura are described certain diseases, probably of infective nature, in which hæmorrhages into the skin of varying intensity are observed. Petechiæ, ecchymoses and vibices are all superficial hæmorrhages in the form of spots, patches or stripes not raised above the general level of the skin, and characterized by their bright red or dusky colour, which does not disappear under pressure with the finger or a glass. The epidermis may be raised in blebs over some of the hæmorrhages (Fig. 7). The lower extremities of young persons are the most frequent seats of small or large hæmorrhages, which develop—generally with rheumatic symptoms and rise of temperature—commonly about the knees, and especially in spring and autumn (*Purpura vel Peliosis rheumatica*). The number of hæmorrhages is often enormously increased by repeated relapses until, after several weeks, the disease ceases and the effused blood is gradually absorbed, undergoing the well-known changes of colour.

Some forms of purpura, such as Werlhof's disease and scurvy, in which the internal organs and mucous membranes are chiefly involved, differ from this clinical picture, and are serious maladies, whereas simple purpura rheumatica is a perfectly harmless affection.

The **Diagnosis** can be easily established from the symptoms described.

The **Prognosis** of simple purpura rheumatica is favourable.

The **Treatment** consists of rest in bed with elevation of the extremities, and the administration of hæmostatic remedies, such as ergotin, tincture of iron, etc.; salicylate of soda in doses of 30 to 60 grains daily may be given on the ground of the probable infectious nature of the disease.

Fig. 6. Model in the Vienna Clinic (Henning). The subject of the illustration was suffering from jaundice.
Fig. 7. Model in Neisser's Clinic in Breslau (Kröner).

Herpes Simplex.

Plate IV., Fig. 8. Plate V., Figs. 9, 10.

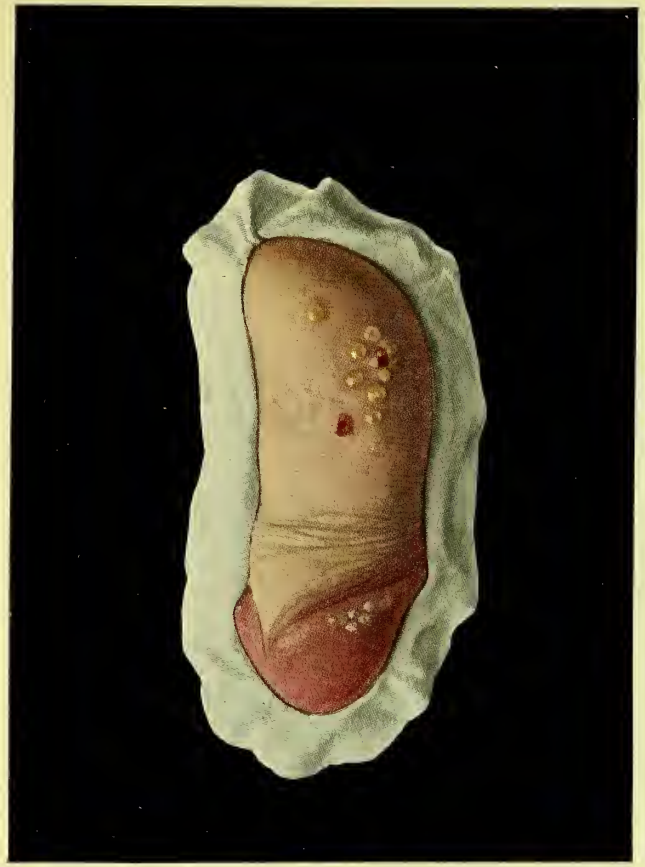
Herpes simplex is the commonest of the herpetic group of skin diseases, *i.e.* of benign affections which begin acutely and are characterized by the appearance of grouped vesicles on normal or slightly inflamed skin, and which exhibit no further developments but only undergo regressive changes. They are most frequently localized on the face (Fig. 10) or genitals (Figs. 8, 9). Sometimes with sharp febrile symptoms and sometimes without them, one or several groups of small vesicles—with watery contents—appear upon the lips or their mucous surface, on the immediately surrounding skin or about the nose. These, after a short existence, dry up and heal without leaving scars. The eruption may also appear on the genitals, in men on the prepuce or glans, in women on the vulva and clitoris. Secondary infection or mechanical irritation may result in deeper lesions, so that some delay may occur in the healing process. It is specially to be noted that relapses are extremely common and that the seats of previously existent hard chancres show a marked predilection for herpetic outbreaks, both on the genitals and elsewhere. In some instances direct communication from person to person appears to be not improbable. As a rule there are no subjective symptoms except a little burning.

The **Diagnosis** can always be easily made on the face. On the genitals the differentiation of a herpes which has been badly treated, or become the seat of pus infection, from a soft chancre or primary syphilitic sore, may be difficult at first, but the course of the disease soon settles the point, as well as the determination of the presence or absence of the Spirochæta pallida.

The first point in **Treatment** is to ward off secondary infection and to bring about the earliest possible undisturbed desiccation of the vesicles; this can be done by means of powders, ointments or pastes, but the best application is 90-95 per cent. alcohol with the addition of 1 per cent. of carbolic acid or resorcin, or $\frac{1}{4}$ per cent. of thymol or salicylic acid.

Fig. 8. Model in Saint Louis Hospital in Paris (Baretta), No. 1,923 (Fournier's case).
Figs. 9, 10. Models in Neisser's Clinic in Breslau (Kröner).

No. 7. Purpura haemorrhagica.



No. 8. Herpes progenitalis.

No. 10. Herpes labialis.

No. 9. Herpes progenitalis.

Herpes Zoster. Shingles.

Plate VI., Fig. 11. Plate VII., Fig. 12.

Herpes zoster (*Shingles, Zona, Ignis sacer*) occurs as an acute infective disease, the cause of which is unknown ; it is characterized by an outbreak of vesicles arranged in groups on an inflamed base and following the distribution of nerves or nerve plexuses (Fig. 11). The disease is almost always unilateral, and the eruption is generally accompanied by neuralgic phenomena and swelling of the corresponding lymphatic glands. The vesicles of any one group are always in the same phase of development, but separate groups may appear either simultaneously or consecutively. The number of groups, as well as the number and size of the elementary vesicles, vary within very wide limits. Sometimes only a few papular groups are present or there may be blebs as big as cherries. Subsequently the blebs dry up, leaving no scar. But in a certain number of cases the base of the vesicles is hæmorrhagic or gangrenous (Fig. 12), and in them very characteristic grouped scars are left, sometimes with pigmented margins.

Zoster occurs most frequently in spring and autumn, like other infective diseases, and as in them one attack, as a rule, confers immunity against others throughout life. The seat of disease may be in the distribution of the trigeminal nerve, or of various spinal nerves or plexuses. In cases where death has taken place owing to intercurrent disease, lesions of the corresponding

spinal ganglia have generally been demonstrated; but zoster of toxic origin also occurs, *e.g.*, after poisoning by arsenic or carbonic oxide, and it may result from disease of the nerve trunks.

Central disease of the brain and spinal cord may also cause zoster. The primary lesion is, therefore, always to be sought for in the nervous system. Transgression of the middle line (which sometimes occurs) and extension to the distribution of neighbouring nerves are easily explained by the existence of nerve-anastomoses.

The **Diagnosis** of zoster is easily established from its unilaterality, its typical vesicles and the concomitant neuralgia.

The **Prognosis** is generally favourable, but must be guarded with reference to the accompanying neuralgia.

The **Treatment,** in view of the infective nature of the disease, must first consist of the administration of salicylic preparations. The pain may be combated by quinine, phenacetin, antipyrin and similar remedies. The best form of local treatment consists in alcohol compresses, under which healing occurs most rapidly. If there is extensive gangrene, hot compresses of a solution of silicate of aluminium or weak nitrate of silver may be used.

Fig. 11. Model in Neisser's Clinic in Breslau (Kröner).
Fig. 12. Model in Lesser's Clinic in Berlin (Kolbow).

No. 11. Herpes zoster.

Dysidrosis.

Cheiropompholyx.

Plate VII., Fig. 13.

In persons who sweat freely there often occur in summer small, clear vesicles which lie deep in the epidermis, especially on the sides of the fingers and toes, on the palms and soles, more rarely on the backs of the hands and feet. They are mostly localized round the excretory sweat-ducts, and are accompanied by few or no inflammatory phenomena (Fig. 13). Larger blebs sometimes, but seldom, form, the contents of which become cloudy. The vesicles gradually dry up and recovery ensues, accompanied by marked scaling. The disease gives rise to considerable itching. A transition to the establishment of eczema is sometimes observed.

The **Diagnosis** is at first easily made on the grounds of the localization of dysidrosis and the absence of initial inflammatory symptoms.

Treatment attains only moderately favourable results. The hyperidrosis and itching must be chiefly combated; for these purposes painting with alcoholic solutions of tar, resorcin or liquor carbonis detergens is useful, but relapses occur with great regularity.

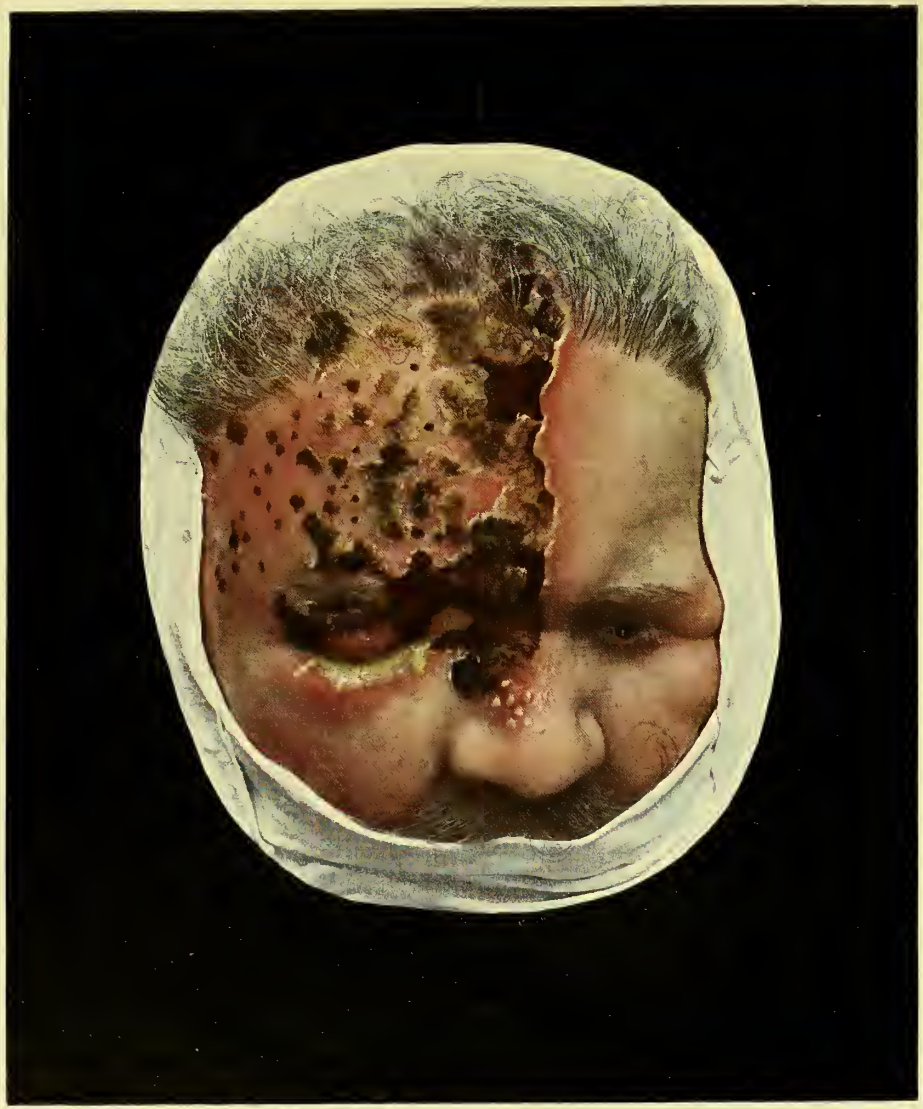
Fig. 13. Model in Neisser's Clinic in Breslau (Kröner).

Pemphigus.

Plate VIII., Figs. 14, 15. Plate IX., Fig. 16.

The name Pemphigus connotes a severe skin affection of unknown cause, in which a bullous eruption of very chronic nature appears, accompanied usually by febrile phenomena. We do not consider infantile pemphigus (*Pemphigus neonatorum*) or Duhring's disease (*Dermatitis herpetiformis*) as being real forms of pemphigus. Usually two forms of chronic pemphigus vulgaris are recognized,—the one benign, the other malignant—but they cannot be definitely differentiated from one another, inasmuch as the latter may develop from the former. In both forms blebs of various size and indiscriminate distribution, and which are filled with clear fluid, occur in crops, arising chiefly from healthy skin (Fig. 15), either with or without rise of temperature; sometimes an erythema precedes the eruption. More rarely the contents of the blebs are hæmorrhagic.

The course of pemphigus is usually extremely chronic, and after the disappearance of one eruption intervals of months or years may occur before another attack ensues. The mucous membranes may also be attacked apart from the skin, in which case the bullæ do not attain their full development, but the raised epidermis adheres in the form of a whitish, circumscribed membrane; however, the mucous membrane is usually involved only in severe or fatal cases in which the skin is also implicated.



No. 12. Herpes zoster gangraenosus.

No. 13. Dysidrosis.

In the group of pemphigus diseases *Pemphigus foliaceus* and *Pemphigus vegetans* occupy a special place. Other forms such as *P. circinatus*, with ringed grouping of the vesicles, *P. gyratus*, and *P. pruriginosus* with severe itching, must be classified along with Pemphigus vulgaris.

P. foliaceus and P. vegetans almost always end fatally; in the former (Fig. 16) the blebs are extremely flabby and flat, their contents being cloudy. Often the process does not go so far as bleb formation, but the epidermis peels off in thin lamellæ over extensive areas. No normal reproduction of the epidermis takes place, so that after removal of the scales a weeping rete Malpighii is exposed or, if some apparent skinning over take place, the slightest mechanical injury suffices to expose the deep layers of the skin. The disease is accompanied by violent itching and profound interference with general nutrition, and, after a prolonged period, death ensues.

Pemphigus vegetans as a rule first manifests itself by blebs, on the seat of which condylomatous outgrowths form, especially on surfaces of skin in apposition, on the genitals and surrounding parts (Fig. 14), in the axillæ and below the mammæ; in these places no normal keratinisation occurs, but a dirty, horribly fœtid discharge accumulates. The disease always terminates fatally, its course being usually interrupted by many protracted intervals of passivity.

The **Diagnosis** of P. vulgaris is easy in typical cases if bullous eruptions alone appear. If erythematous prodromal rashes occur, it must be diagnosed from erythema multiforme by the differences in localization and course. In its early stages P. vegetans may easily be mistaken for syphilis, but the absence of other signs of syphilis, the course of the disease and

the utter inefficacy of antisyphilitic treatment will decide the matter.

The diagnosis of P. foliaceus causes difficulty in many cases, especially as regards pityriasis rubra; the weeping, moist base of the lesions and the occurrence of flabby blebs will, however, decide the diagnosis, as they do not occur in pityriasis rubra.

The **Prognosis** in pemphigus must be very guarded, as the differentiation between the mild and severe forms is at first extremely difficult to establish. In every case of definite pemphigus it must be considered dubious.

No efficient **Treatment** of pemphigus yet exists. We can only diminish the often terrible sufferings, the itching, and the frightful pain which results from the separation of the adherent clothes or bandages from the ulcerated skin by ointments, powders or baths; in extensive cases permanent baths are the best. Internally arsenic, strychnine and antipyrin are recommended, but their value is more than dubious.

Fig. 14. Modelin Neisser's Clinic in Breslau (Kröner).
Fig. 15. Model in Lassar's Clinic in Berlin (Kasten).
Fig. 16. Model in Neisser's Clinic in Breslau (Kröner).

No. 14. Pemphigus vegetans.

No. 15. Pemphigus vulgaris.

No. 16. Pemphigus foliaceus.

Pemphigus Neonatorum.

Plate X., Fig. 17.

Pemphigus neonatorum is an infective disease which almost always occurs in epidemics; it attacks especially new-born, but occasionally older, children. Vesicles and blebs appear with or without fever on skin which may be normal or reddened; their epithelial covering generally soon ruptures so that the rete Malpighii becomes exposed (Fig. 17). As the disease progresses relapses may occur; but, on the other hand, it may rapidly recover after a single outbreak. Complications may take place, due to secondary infections.

The **Etiology** is not accurately determined; the distribution of the eruption is in no sense characteristic.

The **Differential Diagnosis** from syphilitic pemphigus of the newly born may be established by the localization in the latter of the blebs on the palms and soles, as well as by concomitant evidences of syphilis.

The **Prognosis** is usually favourable, but epidemics of unusual severity sometimes occur.

The **Treatment** consists chiefly of protecting the blebs by powders, and in the prevention of secondary infection by suitable dressings, or by baths to which antiseptics have been added.

Fig. 17. Model in Lesser's Clinic in Berlin (Kolbow).

Dermatitis Herpetiformis

(*Duhring*).

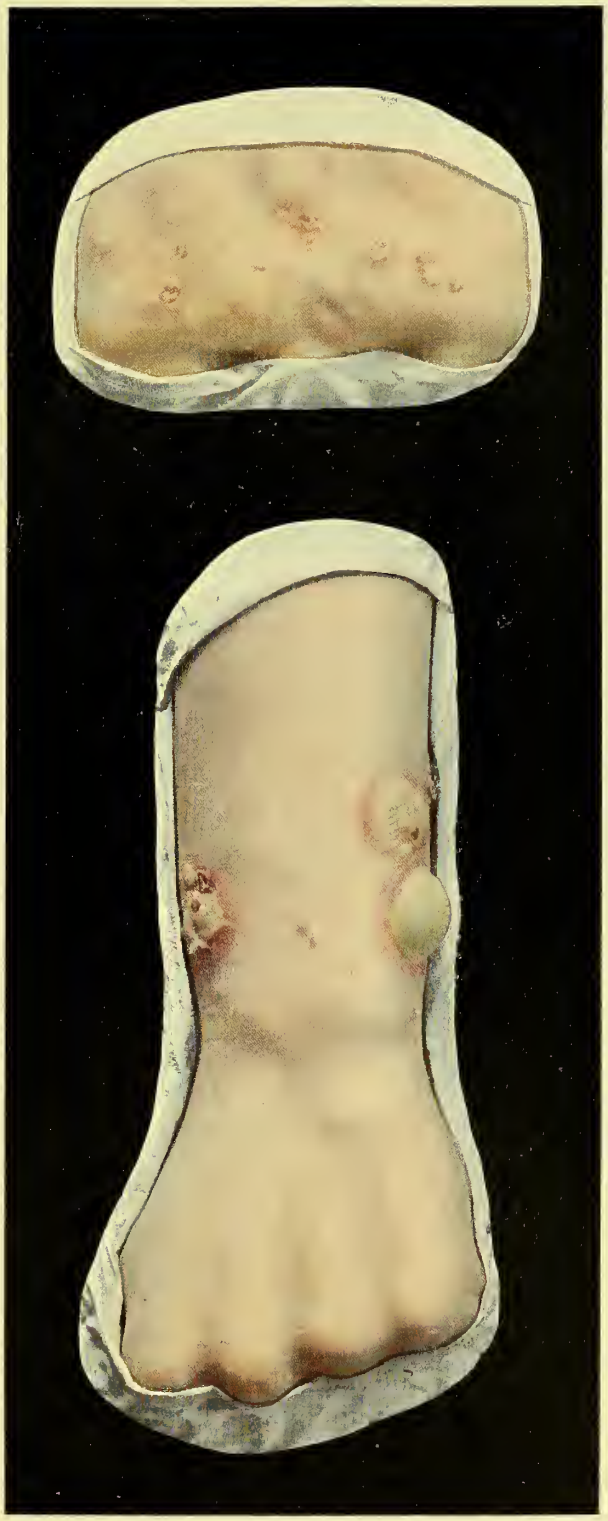
PLATE X., FIG. 18.

The disease called Dermatitis herpetiformis, so distinctly described and differentiated by Duhring, is characterized mainly by the multiformity of its manifestations. Along with urticarial wheals, erythema and papules occur, but especially blebs of various size, accompanied by nervous symptoms and extremely violent itching. The process may be arrested in any stage of its evolution, or blebs may appear without preliminary lesions. The multiformity of the morbid picture is increased by itching, rubbing, and secondary infections. As a rule, frequent relapses follow one another, and the disease extends over an extremely prolonged period; but, despite the fact that the patients become greatly exhausted by the severe subjective symptoms and the frequent relapses, the prognosis—in contrast with that of pemphigus—may be regarded as generally favourable.

The **Etiology** is unknown; but a neurosis is accepted, in many quarters, as its cause.

The **Diagnosis** can, as a rule, be established only after long observation, on the grounds of the

No. 17. Pemphigus neonatorum.



No. 18. Dermatitis herpetiformis (Duhring).

polymorphism, the intense itching, the repeated relapses, and the benign course of the disease.

Treatment can only be symptomatic ; nervous phenomena must be combated by nerve-tonics, and the sufferings of the patient alleviated by baths and the application of antipruritic remedies. Lotions containing alcohol, sulphur baths and tarry preparations often act favourably ; as may the internal administration of arsenic and strychnine.

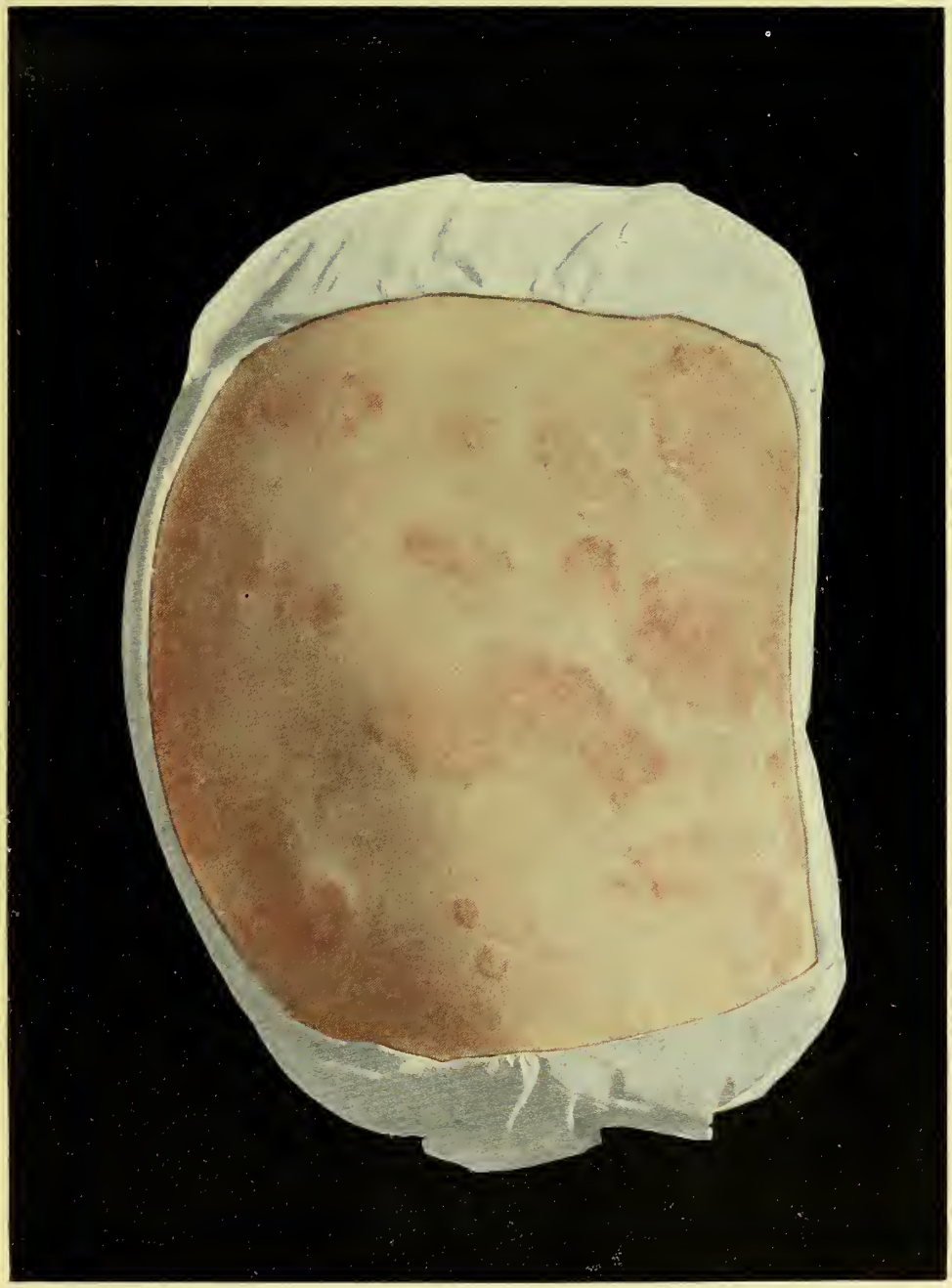
Fig. 18. Model in Saint Louis Hospital in Paris (Baretta). Tenneson's case, No. 1352.

Urticaria.

PLATES XI., XII., XIII.; FIGS. 19, 20, 21, 22.

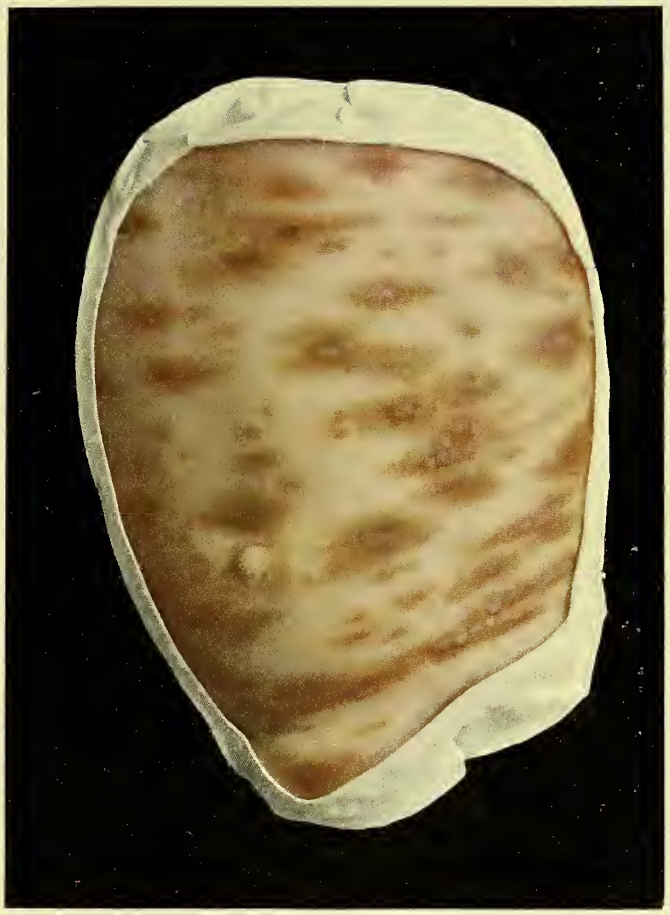
Urticaria is characterized by the appearance of wheals—*i.e.*, of very itchy, flat papules—either white, bright red (Fig. 19), or more rarely dark red (Fig. 20) or livid in colour, which are of varying size, and appear either isolated, or in groups, or confluent. The wheals may disappear as quickly as they appear, without, as a rule, leaving any pigmentation; serpiginous figures may be formed by the confluence of contiguous efflorescences. The extent of the skin affected varies extraordinarily; not infrequently the greater part of the body surface is affected either at one time, or by the occurrence of successive outbreaks of the disease. In many persons there is a marked tendency—either congenital or acquired, as the result of previously existing skin diseases—for the development of wheals on any part of the skin submitted to irritation; every scratch mark becomes the seat of an urticarial linear tract (*U. factitia*).

In children small wheal-like papules, intermixed with true wheals, often occur in frequently repeated outbreaks; these papules may exhibit a vesicle or blood-crust on their surface (Fig. 22)—*Lichen urticatus*, *Strophulus*—constituting an affection which deserves special consideration, as it represents in many instances



No. 19. Urticaria.

No. 20. Urticaria rubra.



No. 21. Urticaria pigmentosa.

the forerunner of a severe, generally incurable, disease of the skin—viz., Prurigo.

The *acute circumscribed œdemas*—the so-called *giant Urticaria*—also belong to the urticarias, in which not only the skin, but also deeper tissues are affected; they appear and disappear suddenly; the disease is rare, and generally hereditary.

The very rare disease *Urticaria pigmentosa*, which occurs in children, must also be mentioned. The extremely persistent wheals leave deep pigmentary lesions, which exhibit the phenomena of factitious urticaria, and as a rule, persist throughout life (Fig. 21).

Urticaria may be evoked by external irritants in contact with the skin (insect bites, nettles, etc.), but the eruption does not remain confined to the part directly affected; it may also proceed from the gastro-intestinal tract, being caused by certain foods in different individuals (fish, crab, fruit, especially strawberries), or by drugs. As a rule it is accompanied by digestive disturbances, such as vomiting and diarrhœa (*U. ab ingestis*).

Internal disorders, especially such as determine changes in the quality of the blood (leukæmia, diabetes), are not infrequently accompanied by urticaria. Disorders of the generative organs in women may also cause urticaria, as may the introduction of urethral bougies in men. Pregnant women frequently suffer from factitious urticaria throughout their pregnancy, which usually disappears after delivery.

In addition to these forms, there are numerous cases of chronic urticaria in which no cause can be discovered, and which are specially rebellious to treatment.

The **Diagnosis** of urticaria depends upon the presence of typical, evanescent wheals, and on the occurrence of itching. Some drug eruptions can scarcely be differentiated from urticaria.

The **Prognosis** must be guarded in chronic urticaria of childhood (? Prurigo), but, generally speaking, is favourable, exception being made for chronic nettlerash in which the general condition may be very unfavourably influenced by itching and insomnia.

Treatment can only be successful in cases where the cause can be traced and therefore removed, particular attention being paid to disorders of digestion and general diseases. The cure of any affection of the female generative organs will often bring about recovery in cases of long-standing urticaria. If no cause can be discovered, treatment with atropine, arsenic, pilocarpine, ergotin, and finally with chloride of calcium, may be tried. In such cases the principal task is the relief of the sometimes excruciating itching. Opiates must only be used with the greatest caution as hypnotics; antipyrin sometimes stops attacks of irritation.

With regard to external treatment, it must be remembered that patients react in widely different fashion to heat and cold; the former is sometimes efficacious in the form of warm baths or douches, but cold-water applications are often followed by better results. Lotions of pure alcohol, menthol, liquor carbonis detergens or tar may be tried, as well as tumenol, ichthyol or carbolic acid. Recently bromocoll, either in the form of salve or lotion, has been used successfully as an antipruritic. All mechanical

No. 22. Urticaria chronica infantum (Strophulus).

irritation of the skin, by rubbing or wearing coarse underclothing, must be avoided.

Fig. 19. Model in Neisser's Clinic in Breslau (Kröner). A man, thirty years of age, suffering from chronic urticaria since the age of one year.

Fig. 20. Model in Neisser's Clinic in Breslau (Kröner).

Fig. 21. Model in Neisser's Clinic in Breslau (Kröner). Boy, two years old, suffering also from tetany. The affection distributed over the entire body ; skin reflexes exaggerated ; factitious urticaria over the entire skin.

Fig. 22. Model in Neisser's Clinic in Breslau (Kröner).

Perniones. Chilblains.

Plate XIV., Fig. 23.

With the advent of winter, especially in anæmic young persons, and often as the effect of only slight degrees of cold, livid red nodules or swellings of doughy consistence occur on the hands and feet (Fig. 23), less frequently on the face and ears, which cause extreme itching, especially when the patient is warm. Slight mechanical irritants produce bullous elevations of the epidermis over these lesions, with blood-stained, serous contents, from which ulcers very easily form, which are atonic and heal with difficulty. In the majority of cases hereditary predisposition can be traced. Spontaneous recovery ensues with the advent of warm weather, but recurrences are almost always to be expected.

The **Diagnosis** of chilblains is easily made, based upon their seat and their occurrence with the onset of cold weather; the frequency of recurrences is to be borne in mind with regard to **Prognosis**.

Treatment must, in the first instance, be directed towards combating the anæmia, which is almost always present, and efforts must be made to harden the skin. After the development of chilblains, ulcers may be induced to heal by wet dressings with weak (1 per

cent.) solutions of nitrate of silver, or with 1 per cent. nitrate of silver in balsam of Peru ointment. Disturbances of circulation and changes in the vessels may be benefited by light treatment, massage, hot baths, and subsequent washing with alcohol, painting with tincture of iodine, collodion or traumaticin, by alcohol sprays, or by vigorous inunction of a 10 per cent. chloride of lime ointment.

Fig. 23. Model in Neisser's Clinic in Breslau (Kröner).

Raynaud's Disease.

Plate XIV., Fig. 24.

In **Raynaud's disease**, which is a malady due to disturbed innervation of central origin of the skin bloodvessels, local asphyxia with coldness and numbness occur along with very pale, or often cyanotic, discoloration of the skin (Fig. 24). For years the process may be limited to these associated symptoms, but necrosis may also occur, beginning at the tips of the fingers and toes (*symmetrical Gangrene*).

Treatment consists in attempting to improve the condition of the circulation by baths, massage, etc., but the results hitherto obtained are not encouraging.

Fig. 24. Model in Neisser's Clinic in Breslau (Kröner). See Transactions of Breslau Dermatological Congress, 1901.

No. 24. Raynaud's Disease.

No. 23. Perniones.

Lupus Erythematosus.

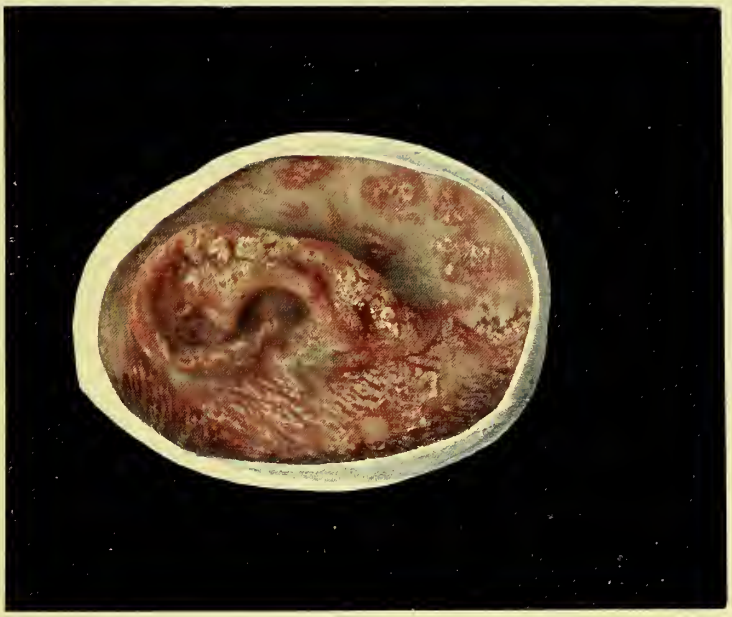
Plates XV., XVI., XVII., Figs. 25, 26, 27, 28, 29.

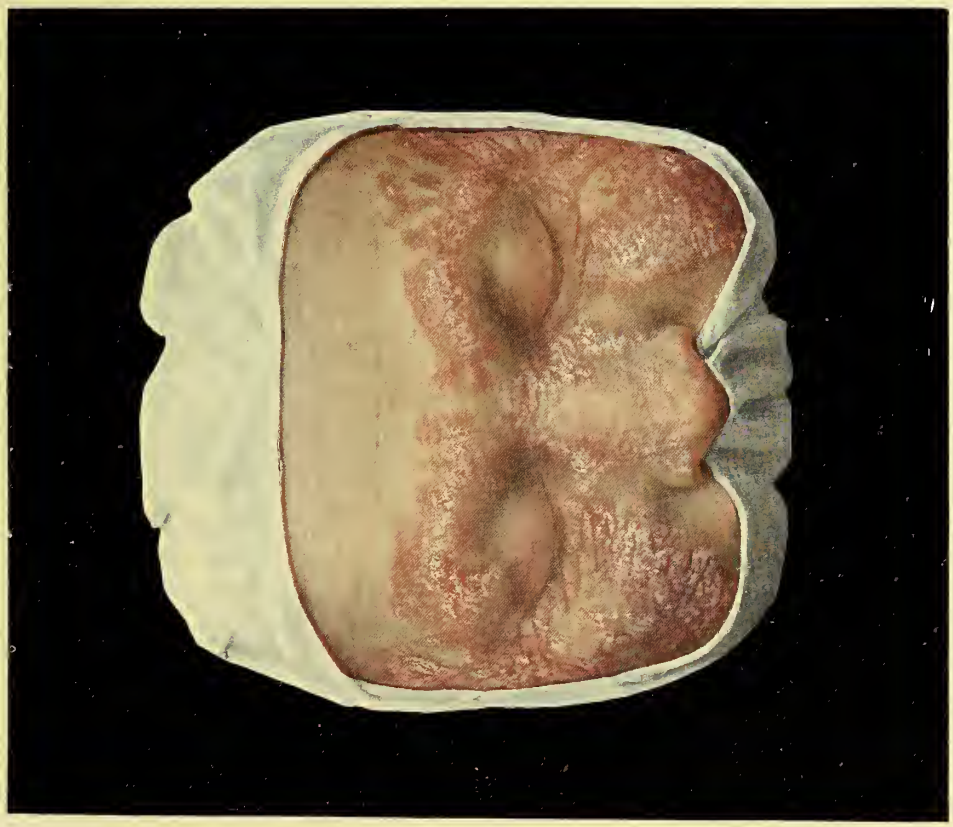
In **Lupus erythematosus** the skin changes usually begin on the face (Fig. 25), on the ears (Fig. 26), or on the scalp (Fig. 28), more rarely on the extremities (Fig. 27); they originate as indeterminate red papules, which develop by peripheral extension to form discoid patches with margins of bright red colour, covered by firmly adherent scales. These become greenish if of long duration, and, if separated, show bristle-like processes on their under-surface corresponding to dilated follicular ducts. At the margin comedo-like plugs are also often present which, however, are drier and not so fatty as true comedones. In addition to these deeply penetrative 'follicular' cases of Lupus erythematosus, more superficial 'vascular' forms are frequently observed. The process extends peripherally with extraordinary slowness, while cicatricial atrophic spots, often traversed by telangiectases, develop in the centre without the occurrence of ulceration. A bats-wing configuration frequently results from the favourite localization on the nose and cheeks. On the scalp the cicatricial atrophy gives rise to permanent alopecia. The discoid form of Lupus erythematosus also occurs pretty frequently on mucous surfaces, especially on the lips.

The redness can be entirely dispelled by pressure;

but on 'diascopy' with a lens the well-known nodules of Lupus vulgaris, from which this disease must be carefully distinguished, never appear. Sometimes chilblain-like lesions develop on the fingers, which may form rhagades and fissures, and cause considerable pain; apart from this, the disease causes few or no subjective symptoms. Besides this form, which is called *Lupus erythematosus discoides*, there also occurs an acute form (*Lupus erythematosus disseminatus*), in which numerous efflorescences occur on the face and body, accompanied by violent general symptoms and fever, which involute after a short existence and never extend peripherically, as in the patchy form, but heal with the formation of scars (Fig. 29). This last variety may either develop from discoid Lupus erythematosus, or may arise spontaneously, and is always a serious disorder. The causes of Lupus erythematosus are unknown, but in recent years an attempt has been made to connect the disease with tuberculosis by attributing its existence to the presence of toxins in parts of the body where tubercle bacilli do not exist; no proof of this theory has yet been adduced.

The **Diagnosis** of Lupus erythematosus may be based on its seat, the discoid shape of the lesions, the characteristic scaling, the dilatation of follicles, and the central atrophic scarring. The differential diagnosis from syphilis and Lupus vulgaris must first be established. The former is distinguished by the copious amount of infiltration and the coppery or burgundy-like colour of its elements, while other manifestations of syphilis are seldom absent. As regards Lupus vulgaris, the absence of nodules and ulcers is especially to be borne in mind. Psoriasis and mycotic diseases may be at once eliminated by the absence in them of atrophic scars.





No. 25, 26. Lupus erythematosus.

No. 27. 28. Lupus erythematosus.

The **Prognosis** must be guarded, as treatment is not always efficacious in the discoid forms; the disseminated form is a serious ailment, as has been already remarked.

Treatment.—As Lupus erythematosus usually recovers without deep destruction of tissue, although in no definite period of time, treatment must be adopted which does not involve any implication of the deeper parts. External remedies which produce congestion and serous effusion often expedite the spontaneous tendency to recovery. Vigorous washing with soap, superficial application of the thermo-cautery, painting with tincture of iodine, and the inunction of sulphur or resorcin pastes, are often efficacious; but after each application a period of rest, with the employment of some indifferent salve or plaster till all reaction ceases, must be enjoined. Covering the part with mercurial plaster is often followed by good results. A long-continued course of quinine, with the simultaneous application of tincture of iodine, frequently produces excellent effects, even in obstinate cases. In the vascular form the persistent application of a 10 per cent. salicylic and soap plaster is often of extreme value, and the employment of the high-frequency current has been lauded. Treatment by X rays has been recommended in the follicular form.

Figs. 25, 26, 28. Models in Neisser's Clinic in Breslau (Kröner).

Fig. 27. Model in Saint Louis Hospital in Paris (Baretta). Vidal's case. Symmetrical Lupus erythematosus of the hands, the face being similarly affected.

Fig. 29. Model in the Freiburg Dermatological Clinic. The existence of numerous small round elementary lesions may be recognised, especially at the marginal portions of the patch on the cheek. Under treatment with quinine internally and simultaneous painting with tincture of iodine the disease was reduced to a minimal degree in a short time.

Lupus Pernio.

Chilblain Lupus.

Plate XVII., Fig. 30.

Lupus pernio is a rare disease, the relationships of which to Lupus vulgaris and Lupus erythematosus are not yet clearly defined. It is characterized by the development of large cyanotic, ill-defined infiltrations and swellings, more especially on the uncovered skin of the face, ears and hands. Small excoriations and ulcers may form in some spots, which heal up very slowly after scabbing, leaving scars. The malady, which generally occurs in anæmic persons, may recover spontaneously even after lasting for years.

The **Differential Diagnosis** must be especially established from chilblains. These latter, however, are smaller in size, and disappear with the advent of warm weather.

Treatment. — No certain method of curing Lupus pernio is known. It is advisable to combat anæmia with iron and arsenic. For the ulcerative forms moist dressings may be used; but if the epidermis is intact, warm baths, massage, and mild plasters are suitable.

Fig. 30. Model in Saint Louis Hospital in Paris (Baretta). Tenneson's case, No. 1694.

No. 30 Lupus pernio.

No. 29. Lupus erythematosus disseminatus.

Lupus Vulgaris.

Plates XVIII., XIX., XX., XXI., XXII., XXIII., XXIV., Figs. 31-42.

Lupus vulgaris is the most important disease of the skin produced by the migration of the tubercle bacillus into it — important both on account of its relative frequency, and of the severity of the changes and destruction of tissue produced by it. In most, if not in all cases, it is caused by inoculation from the outside. The primary lesion of lupus—the lupus nodule—first appears as a brownish or brownish-red spot, which becomes pale yellow on pressure with a glass or lens, and which lies completely in the true skin; it is somewhat translucent, shiny and waxy, covered with intact epidermis, and several generally appear together in groups. Its consistence is softer than that of normal skin; a probe firmly applied to the part generally penetrates to a depth of 1 to 2 millimetres (*L. vulgaris maculosus*, Figs. 31, 32).

A slightly raised prominence results from the confluence of neighbouring nodules and their further growth in an outward direction (*L. tumidus*). The lupus nodules may now either disappear by fatty degeneration and absorption with some exfoliation, or may develop into ulcers bounded by smooth, soft margins, which are generally sharply demarcated, but

are sometimes undermined. These ulcers present a more or less vigorously granulating surface, which bleeds easily, and is seldom covered with slough (*L. ulcerans*, Fig. 39). Hypertrophy is sometimes simulated by burgeoning of the granulations (*L. hypertrophicus*, Fig. 35). If the granulations become covered by horny masses, as occurs chiefly on the fingers and toes, a warty appearance is produced (*L. verrucosus*, Fig. 32). The disease described by Riehl and Paltauf as *Tuberculosis verrucosa cutis* probably represents merely a form of Lupus verrucosus. Lupus serpiginosus (Fig. 39) is the result of healing in the centre and extension of the lupus nodules or ulcers at the periphery.

On the mucous membranes lupus shows itself as white, shiny nodules with a thickened epidermal covering, which soon disappears, so as to form lupus ulcers similar to those on the skin; or sometimes the patches are covered with luxuriant granulations (Fig. 42).

From the anatomical point of view lupus is always situated in the skin and subcutaneous tissues; it never directly attacks fascia, muscles or cartilage; these tissues can only be involved secondarily.

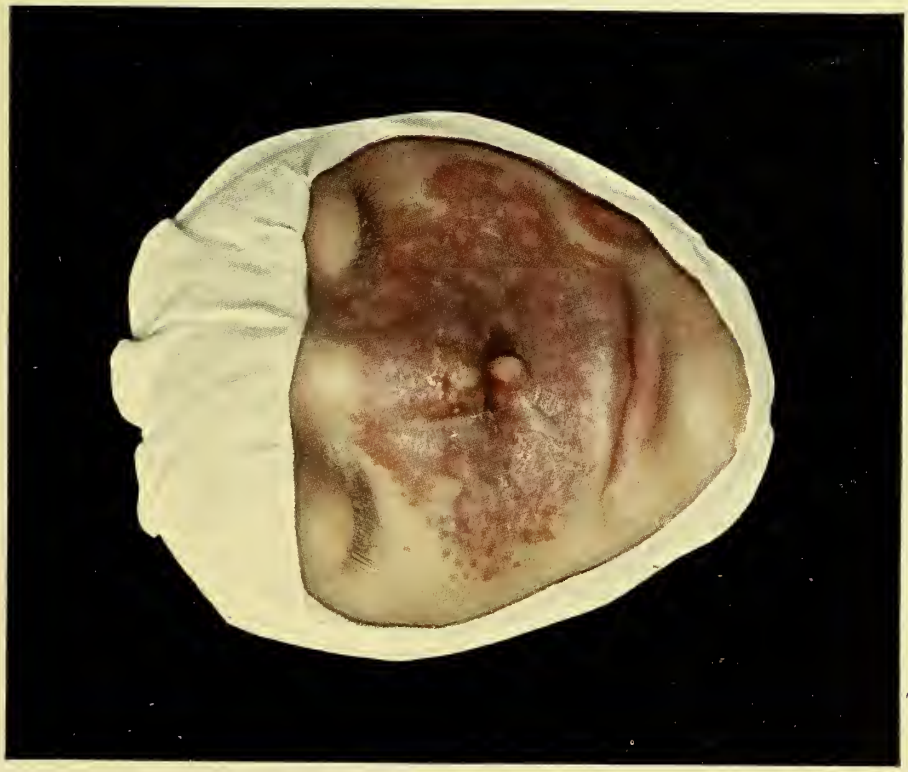
Lupus vulgaris most frequently occurs on the face, especially about the nose, where it causes an eroded appearance owing to absorption and shrinkage (Figs. 33, 34); it is specially characteristic of this condition that the nasal bones remain intact. The starting-point of the disease may be either the mucous membrane or the skin, and hideous mutilation may be produced (Fig. 38), with destruction of the eyes, contraction of the mouth, etc.

Not infrequently, however, lupus is localized on the extremities (Fig. 36), where it may cause the destruction of portions of the fingers and toes, or even of

No. 32. Lupus vulgaris verrucosus.

No. 31. Lupus vulgaris maculosus.

No. 34. Lupus vulgaris; Cornu cutaneum.



No. 33. Lupus vulgaris.

entire fingers and toes by obliteration of the nutrient bloodvessels of those parts (*L. mutilans*, Fig. 41). The phalangeal bones may persist, and their dislocation inside scar tissue may be observed by X rays.

The course of Lupus vulgaris is extremely chronic; the disease usually begins in early childhood, more rarely at more advanced periods of life. It spreads slowly, or gives rise to fresh deposits round about. The general health is often little or not at all impaired, although persons suffering from advanced lupus are more liable to general tubercular infection than healthy individuals. In the course of lupus tubercular infection of lymphatic vessels may occur, as the result of which 'cold abscesses' may form at various points, which may break externally, and from this results so-called scrophuloderma without lupus (*Gommes scrofuleux*). The involvement of the afferent lymph channels as the result of erysipelas — which is not an uncommon complication—leads to the formation of elephantiasic growths on the genitals and extremities (Fig. 40), the lupus origin of which can only be established with difficulty after the lupus has healed. A very malignant form of epithelioma develops in some cases on the top of lupus of many years' duration (Fig. 37); more rarely a benign new growth of epithelial origin may develop (*Cornu cutaneum*, Fig. 34).

Sometimes lupus exists secondarily to tubercular diseases of other tissues, more especially to old-standing affections of bones or glandular fistulæ, in which case the lupus nodules are generally present in cicatrices in the immediate neighbourhood of these lesions.

The **Diagnosis** of Lupus vulgaris is not difficult if typical nodules are present, especially when the part is examined by pressing a glass or lens on it, the nodules being thereby rendered manifest by the expression of the hyperæmia which conceals them. The

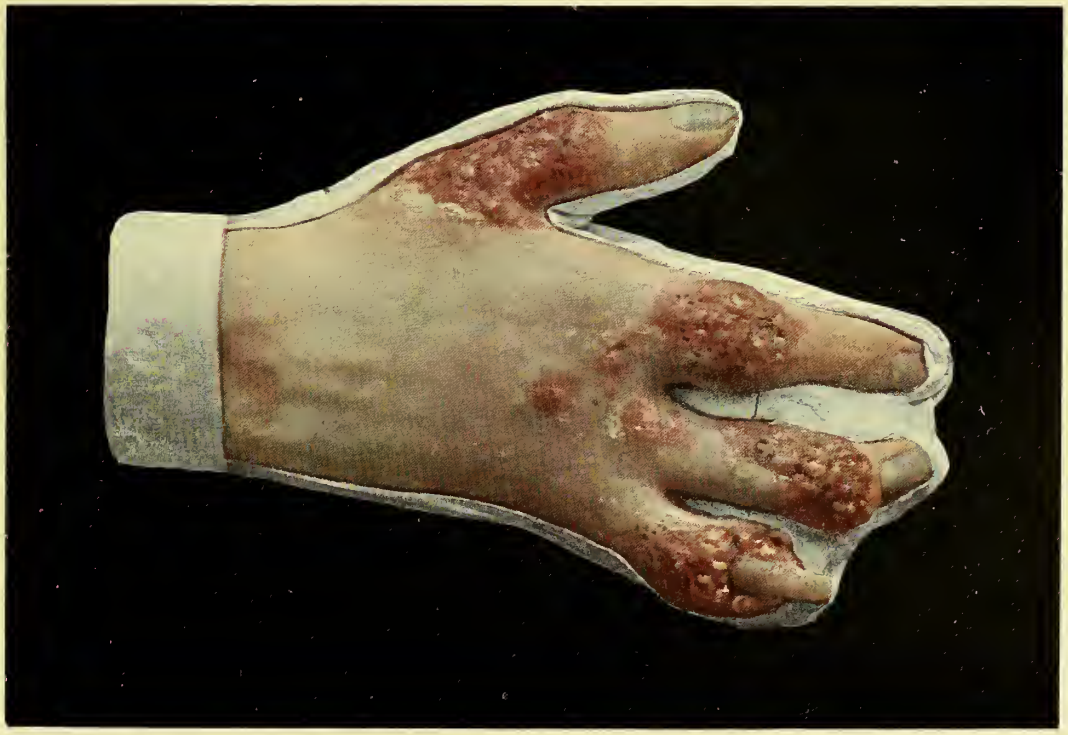
result of exploration with a probe confirms the diagnosis. As, however, nodules cannot be demonstrated in all phases of the disease, its extremely chronic course is worthy of special notice. Syphilis produces much more extensive and deeper lesions in a much shorter time. Other points of importance are—the onset of the malady generally in youth, the absence of pain, and lastly, the reaction to Koch's original tuberculin, which is an absolutely certain criterion.

The differential **Diagnosis** must be established from Lupus erythematosus (absence of implication of bone and of lupus ulceration), from Acne rosacea (lumpy swellings, but no lupus nodules), from Ringworm (microscopical demonstration of fungus, no ulcers), but especially from Syphilis, as already mentioned. This latter point is not always easy, but the inefficacy of antisyphilitic treatment, the special tendency for syphilis to attack bones, and the typical reaction of lupus to tuberculin, generally decide the question.

The **Prognosis** as regards life is favourable, apart from the occurrence of general tubercular infection, but as regards cure it is absolutely unfavourable in extensive cases. Permanently successful results have hitherto been attained only in recent, limited cases suitable for excision. We hope, however, in a few years to effect, by the use of Finsen's light, permanent cures even in severe cases of lupus which have hitherto been considered of the most dire nature, owing to the hideous disfigurement so often produced by them.

The results of **Treatment** depend in the first instance on early diagnosis. If the lupus infiltration is

No. 36. Lupus vulgaris.



No. 35. Lupus vulgaris hypertrophicus.

No. 37. Lupus vulgaris et Epithelioma.

No. 38. Lupus vulgaris.

so circumscribed that it can be removed *in toto* without excessive loss of substance, radical extirpation is to be recommended just as if one were dealing with a malignant tumour; the loss of substance must be remedied by suture or by grafting. In more extensive lupus, or when the subcutaneous tissue and lymphatic vessels are extensively involved, this procedure gives less certain and less beautiful results. By scraping, scarification, galvano-caustic or galvano-cautery, or by hot-air treatment (which, however, often causes cheloid scars), either alone or combined with escharotics, apparently good results may for a time be obtained, but recurrences almost invariably take place. The best caustic is arsenic in the form of arsenical paste, but it cannot well be employed over large surfaces on account of pain and intoxication; the same remark applies to pyrogallol in ointments from 2 to 10 per cent. in strength. Both remedies have a selective action—*i.e.*, they spare the sound and destroy the diseased tissue, but neither protects from relapses. Solid nitrate of silver, especially with the addition of nitrate of potassium to harden the nitrate stick, is of service for boring into nodules covered with epithelium, or may, in strong solutions, be used for ulcers, but its effects are generally too superficial. Chloride of zinc and caustic potash are deeply penetrative and energetic remedies, but they destroy also sound tissue. Lupus ulcers may heal well under 1 per thousand corrosive sublimate, or 2 per cent. permanganate of potash dressings, but the results are not permanent.

Lupus of mucous membranes can be advantageously destroyed by cauterization with lactic acid, or by thermo- or galvano-cautery. The injection of tuberculin, whether of the original or of the recent form (T.R.), cannot effectually heal lupus.

All the foregoing methods produce definite cure in a small number of cases only, and after very prolonged use. Better results appear sometimes to be attained by treatment with Röntgen rays until scabbing is produced; but this method has not hitherto been generally adopted, on account of its very prolonged duration and the sclerodermic changes in the skin which sometimes result from it. If weaker doses are employed so as to cause only a mild reaction, improvement—but not cure—may be effected.

Undoubtedly the best results in extensive cases of lupus, both from the cosmetic and actually curative points of view, have been obtained by Finsen's treatment with concentrated sunlight, or by strong electric light from which the heat rays are eliminated. To judge by the results obtained by Finsen himself, confirmed by those obtained in the Freiburg Clinic, the greater number of cases, even of protracted duration, which formerly would have been considered incurable may, by this means, be brought to a really perfect cure, and with the best imaginable cosmetic results, so that the possibility of thoroughly eradicating lupus is not to be completely rejected. Unfortunately, the general adoption of the Finsen treatment has hitherto been rendered very difficult by the high price of the installation, the expense of the treatment, and by its long duration. None of the cheaper apparatus designed to replace Finsen's original apparatus (Lortet and Genoux, Bang, the Dermo lamp, Foveau and Trouvet) have, despite the great expectations founded upon them, succeeded in surely effecting the cure of lupus; so that up to the present the erection of public institutes provided with Finsen's original apparatus must be considered and advocated as the most potent weapon against this terrible malady.

No. 39. Lupus vulgaris serpiginosus.

No. 40. Lupus vulgaris; Elephantiasis consecutiva.

No. 41. Lupus vulgaris; Mutilatio.

General recuperative treatment must be adopted in lupus as in tubercular affections of internal organs.

Figs. 31, 32, 42. Models in the Freiburg Clinic (Johnson).
Figs. 33, 35, 39. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 34. Model in Saint Louis Hospital in Paris (Baretta). Guibout's case.
Fig. 38. Model in Neisser's Clinic in Breslau (Kröner).
Figs. 36, 40, 41. Models in Neisser's Clinic in Breslau (Kröner).
Figs. 24, 26. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 37. Model in Saint Louis Hospital in Paris (Baretta). Besnier's case. Male, aged fifty-one; disease of twenty-two years' standing, only slightly treated, and especially never with thermo-cautery.

Verruca Necrogenica.

Post-mortem Wart.

Plate XXIV., Fig. 43.

Not infrequently there are present on the hands of anatomists, pathologists and post-mortem room servants peculiar brown or grayish-black hard growths, with reddened and somewhat inflamed surrounding tissue. The affection, which results from the inoculation of tubercle bacilli, is generally quite benign and superficial ; only seldom can its transformation into lupus or extension into deeper tissues (lymphatics, tendons) be observed. Spontaneous cure frequently occurs.

The **Differential Diagnosis** has usually only to be established from common warts, in which there is no surrounding inflammatory zone ; their surface is also generally more uniform than that of post-mortem warts.

The **Prognosis** is almost always favourable.

Treatment must be chiefly surgical. In very extensive cases the question of destruction by Light treatment may be worthy of consideration.

Fig. 43. Model by Professor Jacobi in the Freiburg Clinic.

No. 42. Lupus vulgaris mucosae oris.

No. 43. Verruca necrogenica.

Scrophulodermia.

Plate XXV., Fig. 44.

The subcutaneous lymphatics—and especially the lymphatic glands—are sometimes infected as the result of tuberculous disease of the skin, bones or joints; and, in consequence, painless semi-globular nodules form, either isolated or arranged in lines, which differ in size and vary from a pale reddish to a livid colour. These become attached to the skin from beneath, then gradually soften and break down, discharging a thin, purulent fluid. The walls of the resulting abscesses collapse and flat ulcers form, which secrete a slight amount of discharge and are soon covered with scabs. Their walls are deeply eroded; or narrow fistulæ result, in the neighbourhood of which the skin is extensively undermined. Sometimes spontaneous healing occurs, with the formation of irregular, radiating scars; but in other cases treatment alone effects a cure of this extremely obstinate disorder.

The **Diagnosis** is usually obvious owing to the co-existence of other scrophulo-tuberculous lesions, but sometimes it may present points of difficulty in differentiation from syphilitic gummata. The hardness of the infiltration and moderate degree of softening, as well as the formation of typical, crateriform, sharply-defined ulcers, is to be specially noted. Finally, the beneficial results—or inefficacy—of anti-syphilitic treatment settle any doubts.

The **Prognosis** must be guarded.

Treatment.—The nodules are best treated by surgical extirpation extending well into sound tissue. If extensive softening has taken place, thorough scraping and subsequent dressing with iodoform may be recommended.

Fig. 44. Model in Neisser's Clinic in Breslau (Kröner).

Tuberculide.

Plate XXV., Fig. 45.

The justification of the term Tuberculide as applied to the majority of diseases of the skin supposed to result from the toxins of tuberculosis, or to many so-called 'tuberculous exanthemata,' appears to be extremely dubious. Some skin affections, however (*e.g.*, Erythema induratum of Bazin and Lichen scrophulosorum), are veritable tuberculoses; while the condition named the 'acneiform' or 'necrotic' Tuberculide (*Folliclis*) has a hardly contestable claim to the name of Tuberculide. In this protean disease sharply-defined nodules develop in the subcutaneous tissue, and over these macules, papules or vesicles form. Either absorption or superficial necrotic changes ensue, resulting in loss of substance and the gradual formation of sharply-defined white scars, the surrounding tissue being at first deeply pigmented. The seats of predilection are the backs of the hands, the flexor and ulnar sides of the forearms, and the ears. The eruption may, however, appear on other parts of the body and generally does so in the form of successive crops of lesions appearing in groups. The course of the disease is, therefore, very tedious. Other chronic tuberculous lesions are generally present.

The **Diagnosis** in characteristic cases is based on the typical localization and evolution of the lesions. In others, it can only be established by a process of

exclusion and in consideration of co-existent tuberculous manifestations.

Treatment must in the first place be directed to the tuberculous element in the condition. No specific method of local treatment is yet known.

Fig. 45. Model in Neisser's Clinic in Breslau (Kröner).

No. 44. Scrophuloderma.

No. 45. Tuberculide.

Lichen Scrophulosorum.

Tuberculosis Milio-papulosa Aggregata.

Plate XXVI., Fig. 46.

On the trunk, and less frequently on the limbs of persons suffering from tuberculosis of the skin, bones or glands, there develop (usually unnoticed by the patient) numerous yellow or yellowish-red, acuminate, small papules, sometimes in groups, at other times scattered indiscriminately. These papules, after lasting for some time, develop a small scale on their surface, and if present in larger numbers, coalesce to form scaly, rough, yellowish-brown patches (Fig. 46). The eruption, which generally occurs in young persons, causes no subjective symptoms; only seldom does the transformation of the papules into pustules or acneiform pimples occur. The disease is undoubtedly of tuberculous nature, as shown by reaction to tuberculin, the anatomical structure of the miliary tubercles, the discovery of bacilli in them, and repeated successful inoculation experiments in animals; but it is caused by bacilli of slight virulence. The intensity of the eruption varies according to the condition of the underlying tubercular disease.

The **Diagnosis** can be determined with ease on the existence of the typical papules and the co-exist-

ence of a tubercular basis, or ultimately on the occurrence of reaction to (the original) tuberculin.

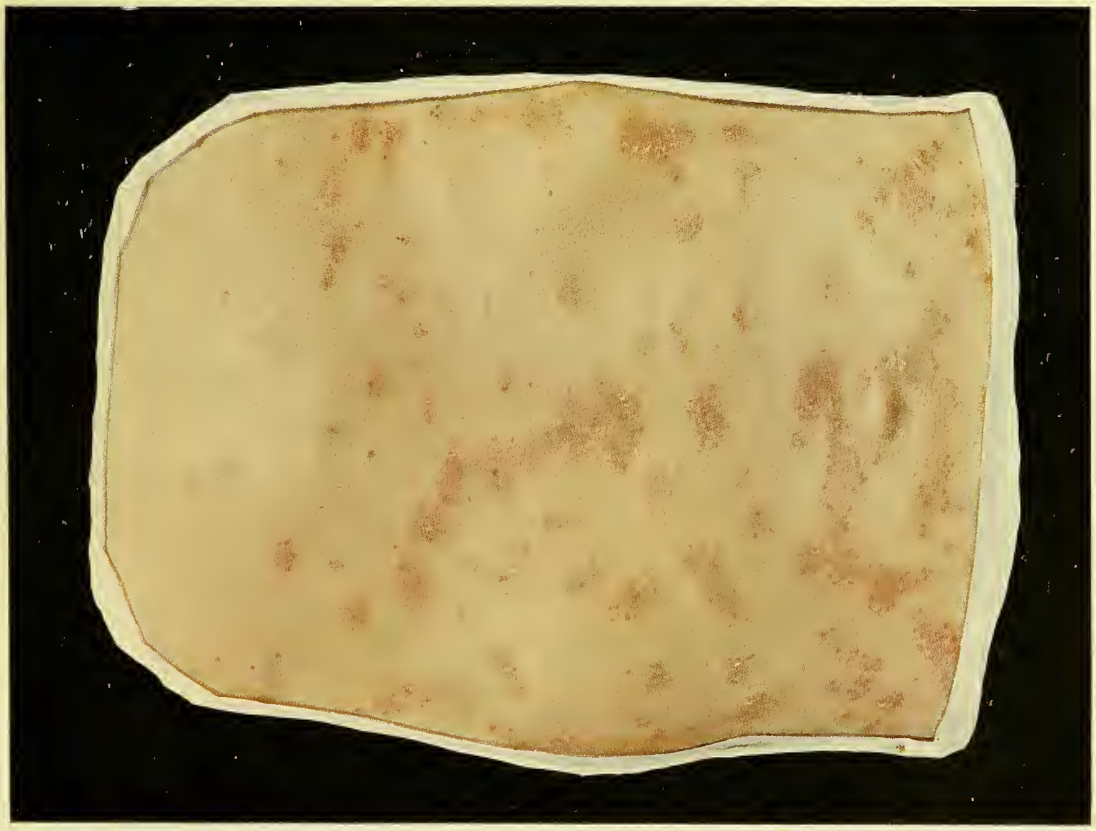
The **Differential Diagnosis** need only be established from the small papular syphilide, which can be eliminated by the failure of antisyphilitic treatment.

The **Prognosis** is favourable.

Treatment must first be directed towards combating the original tuberculosis, and may be assisted by inunctions of cod-liver oil, or preferably, by weak chrysarobin ointment, which soon brings about a cure, without leaving any traces.

Fig. 46. Model in the Freiburg Dermatological Clinic (Johnsen).

No. 47. Erythema induratum scrophulosorum (Bazin)



No. 46. Lichen scrophulosorum.

Erythema Induratum Scrophulosorum.

(Bazin.)

Plate XXVI., Fig. 47.

In young scrofulo-tubercular subjects, more frequently in the female than in the male sex, there are sometimes present on the legs hard, red or bluish-red, densely infiltrated nodules, which develop unnoticed, as they cause neither pain nor itching; these sometimes break and discharge their strikingly yellow-coloured contents. Either after or without rupture the nodules, which are of extremely long and persistent duration, are slowly absorbed, leaving behind deep pigmentation, while at the same time new lesions may develop. They are situated in the true skin and subcutaneous tissue; their margins are well defined; infiltrated areas as large as the palm of the hand may result from their extension and confluence. There is an undoubted connection between this disease (which is of greater frequency than is generally recognised) and tuberculosis, but the existence of tubercle bacilli in it has not yet been demonstrated. Deeper invasions of tissue do not occur.

Treatment must first be directed to the tubercular origin of the disease. Local treatment is generally unnecessary and futile.

Fig. 47. Model by Professor Jacobi in the Freiburg Clinic. A medical man, twenty-nine years of age, who suffered seven years previously from apical tuberculosis treated in a sanatorium. The disease on both legs had existed for many years. Death resulted from pneumonia eight weeks after the model was made.

Tuberculosis Linguæ. Tuberculosis Nasi.

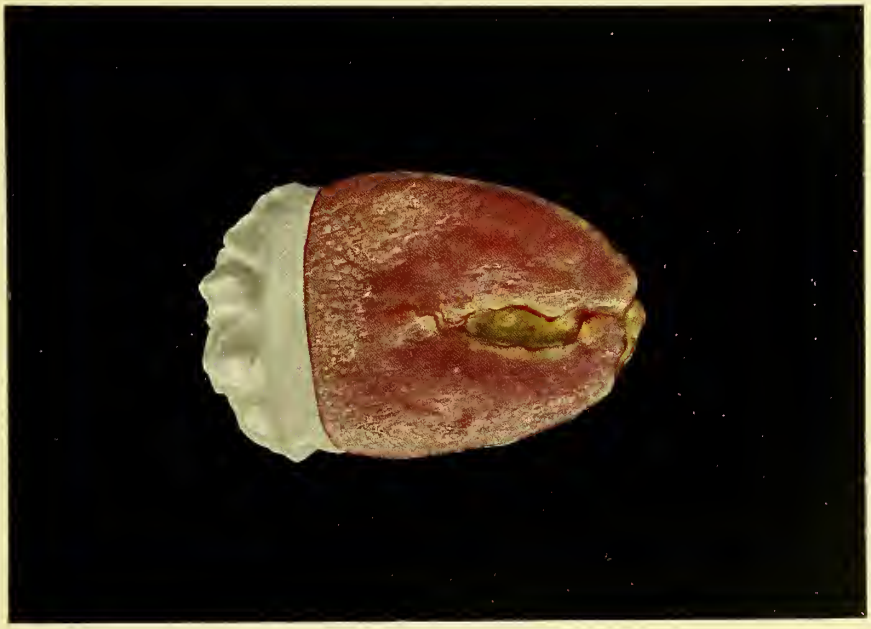
Tuberculosis of Tongue and Nose.

Plate XXVII., Figs. 48, 49.

In persons who suffer from tuberculosis of internal organs, true tuberculosis of the skin and mucous membrane, especially at their points of junction, is observed much less frequently than ordinary lupus. But—generally as the result of direct infection by bacilli in the discharge—ulcers may form which are round or irregular in shape, painful, and extend rapidly; their base is granular, bleeds easily, and is partly covered with sticky discharge, while miliary tubercular nodules may not infrequently be identified at their margins (Fig. 49). On mucous membrane the margins are, as a rule, undermined (Fig. 48). Numerous bacilli are—in contradistinction to lupus—to be found in the ulcers, which have also a much slighter tendency to heal, and extend with far greater rapidity, but seldom attain larger dimensions than in lupus, as the patients die sooner.

The **Diagnosis** can generally be established without difficulty on the grounds of their localization, characteristic appearance, painfulness, and the general tubercular symptoms. It may be confirmed by the

No. 49. Tuberculosis nasi.



No. 48. Tuberculosis linguae.

discovery of bacilli and by the reaction to tuberculin. The differentiation from syphilis may be established by the behaviour of the lesions under antisyphilitic treatment.

The **Prognosis** is unfavourable.

Treatment must have for its object the diminution of pain by dusting with orthoform, anæsthesin, and similar remedies, as the general condition of the patient usually forbids the use of energetic measures. Should such, however, be permissible, attempts may be made to effect a cure with caustics, light treatment, or surgical measures.

Fig. 48. Model in Saint Louis Hospital in Paris (Baretta). Tenneson's case, No. 1768.

Fig. 49. Model in Saint Louis Hospital in Paris (Baretta). Hallopeau's case, No. 2236.

Lepra. Leprosy.

Elephantiasis Græcorum.

PLATES XXVIII., XXIX., XXX., FIGS. 50-55.

Leprosy is a general infective disease, recognised even in ancient times as a contagious malady, which was very widely distributed till the Middle Ages. At the time of the Crusades, however, it was forced into the background by the advance and extension of syphilis, and now its occurrence is extraordinarily diminished, so that it exists with frequency in the tropics only, and is scattered sporadically over Europe (Norway, Russia, Bosnia, Herzegovina, Greece, with a small area near Memel). We draw a distinction between *tubercular leprosy* and *nerve leprosy*, according to the localization of the causative agents of the disease—*viz.*, the lepra bacilli discovered by Hansen and Neisser—whether in the skin or in the nervous system. Not infrequently 'mixed forms' also occur.

In tubercular leprosy, along with the symptoms of a general infective process—fever and prodromal exanthemata—nodules and infiltrated areas of varying size gradually form, over which the skin is usually brown and shiny (Fig. 50), or sometimes may present an eczematous or psoriasiform appearance (Fig. 51). The commonest localization—*viz.*, on the face—produces the early falling of the eyebrows and thickening of the facial folds, which go to make up the so-called

No. 51. Lepra psoriasiformis.

No. 50. Lepra tuberosa.

No. 52. 53. Lepra tuberosa.

facies leontina (Fig. 52). The nodules may be absorbed after long existence, or may form indolent ulcers, healing with great difficulty (Fig. 53), common on the mucous membranes, which are frequently involved. It seems that the mucous membranes are often the starting-point for the skin disease; at least, it is stated in many quarters that the primary lesion exists most frequently in the nostril.

If the disease is of long duration, the peripheral nerves generally are involved, and finally, the internal organs also. After illness extending over years, death occurs, but previously blindness often results from destruction of the cornea or of the entire eyeball.

In nerve leprosy the morbid changes are referable to primary disease of the peripheral nerves. Hyperæsthesia, anæsthesia, and paræsthesia may generally be observed in the earlier stages. The nerve strands which lie close beneath the skin appear thickened like cords. At the same time there are changes in pigment distribution, sometimes corresponding to the irregularly distributed anæsthetic areas, sometimes independently of them, while atrophies and paralyses of muscles occur, especially in the face and hands—the so-called 'clawed hand' (Fig. 55).

Frequently ulcers form as the result of trophic disturbances or of injuries and burns, which are not perceived owing to anæsthesia (*e.g.*, 'perforating ulcers,' Fig. 54), and more extensive destruction of the skin may give rise to mutilation and amputations of fingers and toes.

Although the course of tubercular leprosy is very chronic, and, on the average, lasts from eight to ten years before death ensues, that of pure nerve leprosy and of the mixed forms is even much slower. In such cases a duration of twenty to forty years is not very exceptional.

In fully developed tubercular leprosy the **Diagnosis** is not difficult, and may be confirmed by microscopical demonstration of the bacilli; the history of residence in the tropics or in a leprous district is to be taken into consideration. On the other hand, the diagnosis of nerve leprosy is not easy, especially from certain diseases of the spinal cord; the swelling of the peripheral nerves is of diagnostic importance. In the mixed forms all these points must be considered.

The **Prognosis** is absolutely unfavourable.

Treatment has hitherto yielded no uniformly favourable results. Salicylate of soda, Chaulmoogra oil, with baths and regular hygienic measures applied to the skin, must be tried. The most important measure is prophylaxis by the segregation of lepers, which has enormously reduced the frequency of the disease in Norway, and has been introduced into Germany in a modified degree.

Fig. 50. Model in Lassar's Clinic in Berlin (Kasten).
Fig. 51. Model in Neisser's Clinic in Breslau (Kröner).
Fig. 52. Model in Saint Louis Hospital in Paris (Baretta). Lailler's case, from Mauritius, No. 1000.
Fig. 53. Model in Saint Louis Hospital in Paris (Baretta). Vidal's case, from Calcutta, No. 1217.
Figs. 54, 55. Models in Neisser's Clinic in Breslau (Kröner). The daughter of a fisherman from the neighbourhood of Memel, aged seventeen, with disturbances of sensibility; wasting, especially of the arms and legs, noticed for a year and a half; pigmentary and blanched areas on the trunk; atrophy of the hands, especially of the thenar, hypothenar, and interosseous muscles.

No. 54. Lepra; Malum perforans pedis.

No. 55. Lepra anaesthetica.

Trichophytia. Ringworm.

Plates XXXI., XXXII., XXXIII.,

Figs. 56-63.

Under the name of Trichophytia (*Anglice*, 'ringworm') are included a number of diseases due to the presence in the horny structures of the skin (epidermis, hair, nails), or sometimes in the deeper layers, of Hyphomycetes. The unity of species of these hyphomycetic fungi was formerly unanimously accepted, but cannot now be maintained. There is at least one fungus, the cause of Gruby's disease (*Mikrosporia*, '*small-spored ringworm*'), which is definitely characterized clinically, and must be carefully differentiated from other trichophyta according to Sabouraud's researches. In Germany this disease may be said not to exist, but in England and France it forms the great majority of all cases of ringworm. The affected individuals are almost exclusively children under fifteen years of age. The seat of the disease is generally the scalp, where more or less numerous, round or oval patches are present, over which the hair is broken and stumpy, the scalp itself being covered with white or grayish, firmly adherent scales, here and there pierced by hairs (Fig. 58). Inflammatory phenomena are very slight, and may apparently be absent. This very obstinate complaint usually recovers spontaneously when the patient attains the age of fifteen years.

The principal seat of Trichophytia, properly so-called, is the outer layer of the skin. Here there

occur circular areas, accompanied by considerable inflammatory phenomena, and generally with marked itching, which display either a ring of vesicles at the margin—giving rise to the unfortunate name of Herpes sometimes applied to them—or desquamating, scaly patches, which spread centrifugally (*Trichophytia annularis*, Fig. 56). While the process retrogrades in the centre, it extends at the periphery and forms serpiginous figures by the confluence of neighbouring circles. While the disease progresses recrudescences may occur in the centre of the patches, so that beautiful concentric rings may be formed (*Trichophytia iris*, Fig. 56). Most frequently the face, neck and hands are attacked, but the disease may be situated upon any other portion of the body. On the scalp and in the beard the appearances are identical, but bald, tonsure-like spots result from fracture of the hairs close to their roots. Owing to irritative, eczematous changes, the disease described as *Eczema marginatum* may result.

While these phenomena are due to the presence of the fungus in the upper epidermic layers, its migration into the hair-follicles of the scalp or beard causes much more severe changes. In the conditions denominated *Trichophytia profunda* (Fig. 57), *Sycosis parasitaria* (Fig. 62), and *Kerion Celsi* (Fig. 59), which almost exclusively affect hairy parts, hard, firm, irregular lumps and nodules form, or even dense infiltrations and abscesses (Fig. 61), penetrated by dilated hair-follicles, and may exhibit a peculiar honeycombed appearance; these sometimes attain considerable dimensions. Finally, the hairs disappear by destruction of the follicles, and the affection heals very slowly, generally with the formation of scars.

We have to consider as a last form of Trichophytia of the skin a disease produced—according to the

(Ringworm.)

doctrines of the Vienna School—by an acute invasion of fungus over large tracts of skin. Most authorities, however, consider it as a distinct affection, as the demonstration of the fungus is almost never successful, but in one case in the Freiburg Clinic it was discovered by Boeck's method of staining. This form may either begin as a solitary trichophytic disc (*Médaillon primaire, Herald patch*), which may exist for a long time, or may develop without it. From numerous pale-red little papules round, or more generally oval, discs form, some as large as a shilling, which coalesce very freely, and exhibit centrifugal desquamation at the margin. The process is extremely superficial, and spontaneous recovery usually occurs in the course of some weeks. This disease is termed *Herpes tonsurans maculosus*, and is identical with the *Pityriasis rosea* of Gibert. Its favourite seats are the neighbourhood of the neck, the chest, and back; less frequently the abdomen and limbs are affected (Fig. 63).* The direct infectivity of the disease from person to person does not apparently exist, but its occurrence has often been traced to wearing new flannel underclothing.

Invasion of the nails by Ringworm may show itself under different aspects. The substance of the nails is rendered opaque, becomes brittle and of brownish colour, and their shape is altered, with formation of furrows, ridges, etc. At the margins they easily shell off (Fig. 60).

* Professor Jacobi follows the custom prevalent in Germany and Austria of considering pityriasis rosea a form of ringworm. The fact reported above is, as far as I am aware, an isolated one. Numerous observers in France and Great Britain—among whom I may include myself—have failed to find any trace of trichophyton or other fungus in very numerous cases, and are agreed in thinking that this curious and by no means rare disease is in no way connected with ringworm. The differential diagnosis of the two diseases is, indeed, of the highest practical importance. In my own experience pityriasis rosea is most frequently mistaken, however, for early syphilis.—J. J. P.

The **Diagnosis** of the various forms of ringworm offers no difficulty when the fungus can be microscopically demonstrated, either by staining or after mere soaking in liquor potassæ. The mycelia appear under the microscope as bright, segmented and dichotomous figures, with double contours. Culture experiments may also be employed for confirming the diagnosis. As, however, the existence of the fungus cannot always be demonstrated in all stages, other points worthy of observation are :—the localization, the circular form, the superficial situation, and the centrifugal desquamation at the margin of the patches. The tonsure-like spots over which the hairs are broken off, and the dusky appearance of the diseased hairs, especially after treatment with chloroform, may be considered as diagnostic in the scalp and beard.

As regards **Differential Diagnosis,** psoriasis must first be considered. In psoriasis the scales are larger, more brilliant, and as a rule, punctiform hæmorrhages occur after their removal with the nail, while psoriasis generally itches less than ringworm. Certain forms of eczema may exhibit similar outlines, but they are seldom so definite; the discharge from an eczema may also facilitate the diagnosis. Syphilides show deeper infiltration, and are of darker colour. Lupus erythematosus may be distinguished by the invasion of the sebaceous follicles, as well as by the cicatricial atrophy in the centre. Parasitic sycosis of the beard is to be differentiated from the non-parasitic form chiefly by the greater amount of infiltration and its deeper localization. In its earliest stages favus may sometimes present very similar appearances to ringworm, but after a certain time scutula always form. On the scalp the two maladies are often very difficult to distinguish, especially if favus has been

No. 58. Trichophytia capillitii (Mikrosporia).

(Ringworm.)

No. 59. Trichophytia profunda capillitii Kerion Celsi).

No. 60. Trichophytia unguium (Ringworm).

previously treated, but the point is not one of very great practical importance. It is important to bear in mind that in favus the fungus usually is present in considerably greater abundance than in ringworm.

The **Prognosis** is generally favourable, but the disease in the beard and on the scalp is particularly obstinate.

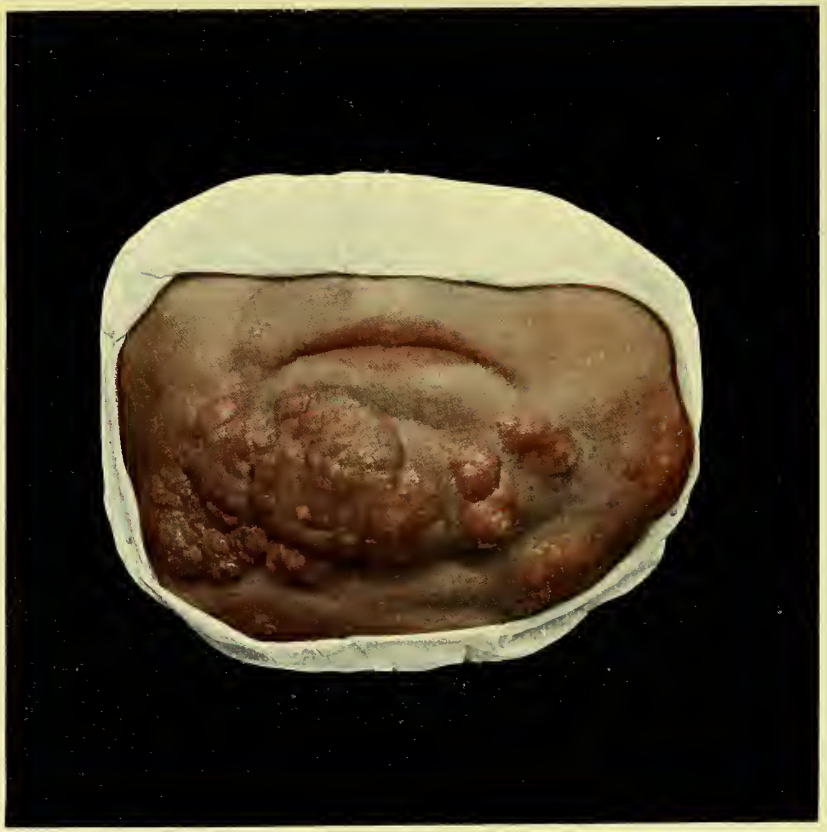
Treatment.—Cure can easily be obtained, when the disease affects merely the epidermis of glabrous parts, by means of bactericidal substances, or such as produce vigorous separation of the epidermis. Thus, blue light treatment, tincture of iodine, the inunction of sulphur soap, or of Kaposi's naphthol ointment, attain this object without difficulty in the vesicular and squamous varieties. The principal anti-mycotic remedies in use are chrysarobin, pyrogallol, or a 1 per cent. solution of corrosive sublimate in tincture of benzoin. Tar, either pure or in the form of Wilkinson's ointment, acts very usefully. Pityriasis rosea soon gets well under treatment with weak chrysarobin, naphthol, sulphur or salicylic acid ointments, but the same object may be attained by washing with spirits of tar, the use of zinc-paste or of powders.* The treatment of the deep-lying ringworms is much more difficult; in them poultices may be recommended, followed by compresses of a 1 per cent. solution of acetate of aluminium or resorcin. In later stages chrysarobin, Brooke's paste, or corrosive sublimate, may prove of good service. Epilation must always be practised, and must be a preliminary to the treatment of ringworm of the scalp; afterwards inunction of chrysarobin, painting with tars, solutions

* This does not correspond with the universal experience in England, where the course of the disease is practically unaffected by treatment.—J. J. P.

of corrosive sublimate or tincture of iodine, ointments of sulphur or croton oil, may all be tried. Lastly, 'Light treatment' may effect a cure, although often only after a very long time.*

Fig. 56. Model in Neisser's Clinic in Breslau (Kröner).
Figs. 57, 59, 62. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 58. Model by Professor Jacobi in the Freiburg Clinic. Patient from Hospital St. Pierre in Brussels.
Fig. 60. Model in Lassar's Clinic in Berlin (Kasten).
Fig. 61. Model in Saint Louis Hospital in Paris (Baretta). Vidal's case.
Fig. 63. Model in Neisser's Clinic in Breslau (Kröner).

* The introduction of the Sabouraud-Noiré pastilles for estimating the dosage of X rays has immensely facilitated and shortened the treatment of all forms of ringworm affecting hairy parts. Reference for details must be made to the numerous articles now published. —J. J. P.



(Ringworm.)

No. 61. Trichophytia profunda nuchae.

No. 62. Trichophytia profunda barbae (Sycosis parasitaria).

Erythrasma.

Plate XXXIV., Fig. 64.

Erythrasma shows itself as accurately marginated patches of brown or brownish-red colour, with convex outlines and finely desquamative surface, the peripheral portions of which are slightly reddened. They occur principally on the inner sides of the thighs, close to the genitals, on the scrotum (Fig. 64), labia majora and perinæum, and on the adjacent portion of the abdomen ; they may also attack the armpits and thence spread to the chest and trunk. It is caused by a mycelium, the *Microsporon minutissimum*, and it is always very superficially situated in the epidermis. The disease is obstinate, although absolutely harmless.

The **Diagnosis** is easily made on the grounds of its localization, colour and fine branny desquamation.

The **Treatment** is similar to that of the superficial forms of ringworm.

Fig. 64. Model in Riehl's Clinic in Vienna (Henning).

Pityriasis Versicolor.

Plate XXXV., Fig. 65.

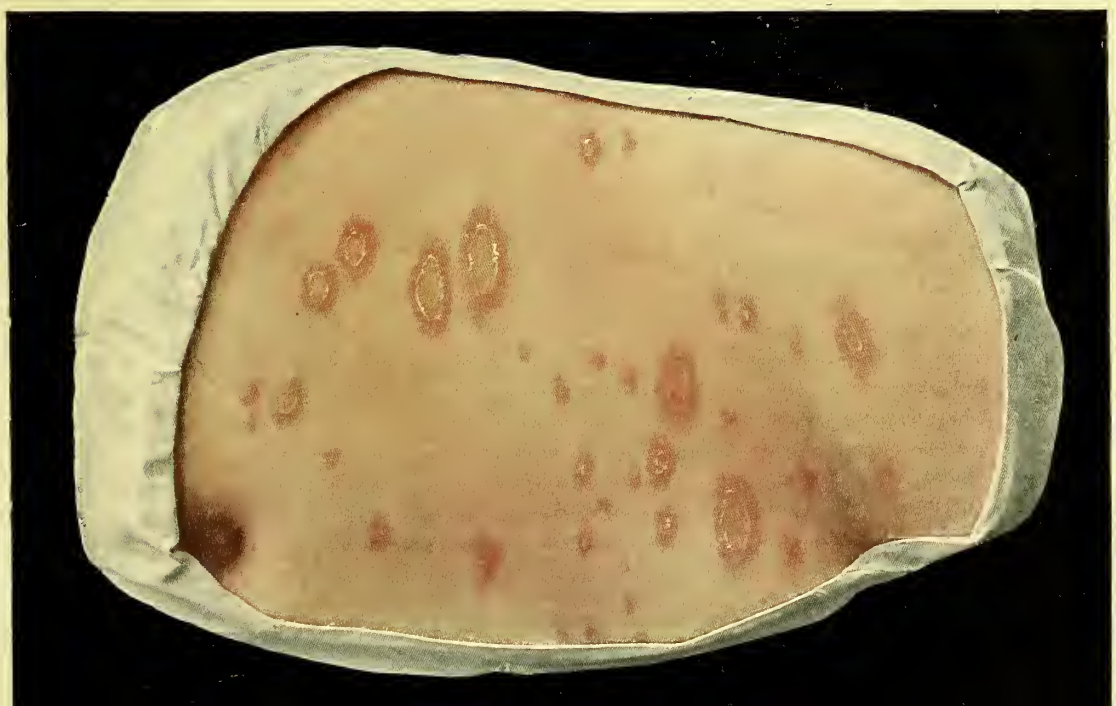
Pityriasis versicolor occurs more especially in persons who sweat freely, and therefore very frequently in the phthisical. It shows itself as small yellow or brownish spots, which sometimes are arranged in confluent patches, and are caused by the invasion of the epidermis by the *Microsporon furfur*. The individual spots are very superficial, only slightly elevated, and rarely somewhat reddened at the edge. The branny desquamation is most marked when the spots are lightly rubbed; there is never coarse scaling. If the part is scratched, the entire diseased corneal layer is removed in the form of a thin pellicle, and the nearly normal subjacent skin is exposed. The disease chiefly affects the trunk, whence it sometimes spreads over the limbs and neck; the face, palms and soles are, however, always free.

Subjective symptoms are, as a rule, completely absent, so that the malady is often unnoticed.

The **Diagnosis** can be made with facility from the yellow colour and localization of the disease, and by the possibility of removing the spots by scratching. It can be confirmed by the detection under the microscope of the network of mycelium and numerous clumps of brightly refractive spores.

The **Prognosis** is favourable.

No. 64. Erythrasma.



No. 63. Pityriasis rosea.

No. 65. Pityriasis versicolor.

Treatment easily produces temporary favourable results, but a permanent cure is obtained only with difficulty. All antimycotic remedies may be used with benefit, as may inunctions of sulphur soap, painting with alkaline spirit of soap, sometimes with the addition of 1 per cent. of naphthol; or baths followed by lotions of corrosive sublimate, naphthol, etc., may be used. The best results we have obtained have been with the treatment recommended by Besnier, consisting of the alternate inunction of salves containing 1 to 3 per cent. of resorcin and salicylic acid, and 5 to 15 per cent. of sulphur.

Systematic disinfection of the underclothing with heat and spraying with formaline solution are probably the best prophylactic measures against relapse.

Fig. 65. Model in Neisser's Clinic in Breslau (Kröner).

Favus.

Plate XXXVI., Figs. 66, 67.

Favus is most commonly present on the scalp in children, and is characterized by the formation of so-called 'favus cups,' or *scutula;* these are saucer-like, yellow or sulphur coloured, hollowed discs, which are composed of thickly welded masses of *Achorion Schönleinei*—the causative fungus of the disease—mixed with detritus and epithelium, covered with a thin coat of the horny layer, and perforated in the centre by a hair (Fig. 66). After the scutulum is removed, a shallow depression is perceptible, which, as the result of the exposure of the rete Malpighii, is moist and glistening. After some time has elapsed the favus cups coalesce to form whitish, mortar-like masses (*Favus confertus*), which in some cases involve the greater part of the scalp, and only show the mode of formation of the composite patches by some scattered cups at their margin. Over the affected areas the hairs are lustreless, as if powdered, and the disease exhales a musty, mouse-like odour. Its course on the scalp is extremely chronic, and in the majority of cases terminates in cicatricial atrophy, as the result of pressure by the favus cups, with permanent alopecia of the affected parts.

The affection occurs more frequently on the scalp than on the body, where circles first appear, either covered with scales, or showing vesicles at their

margin, and these exactly resemble the lesions produced by trichophytia; only after protracted duration do they exhibit one or more scutula in the centre (Fig. 67). On the skin of the body the disease is not at all obstinate, and recovers without leaving any marks.

In rare cases the favus fungus may penetrate deeply, and evoke a condition analogous to kerion. The nails may also suffer in the same way as in ringworm; occasionally cup-like lesions are found embedded in the nail substance.

Recent investigations have proved, contrary to the views of Quincke, Unna and others, that favus is in all probability caused by one form of fungus only, which may assume different developmental forms on different media. Animals (*e.g.*, cats and mice), which are susceptible to invasion by favus, are often the starting-point of the disease in man.

The **Diagnosis** is generally easy in presence of the favus cups, which become of an intense yellow hue when moistened with alcohol, or after microscopical demonstration of the fungus. The powdery appearance of the hairs and the musty odour are also points of importance. Even after favus has terminated, the cicatricial atrophy of the scalp may establish a retrospective diagnosis.

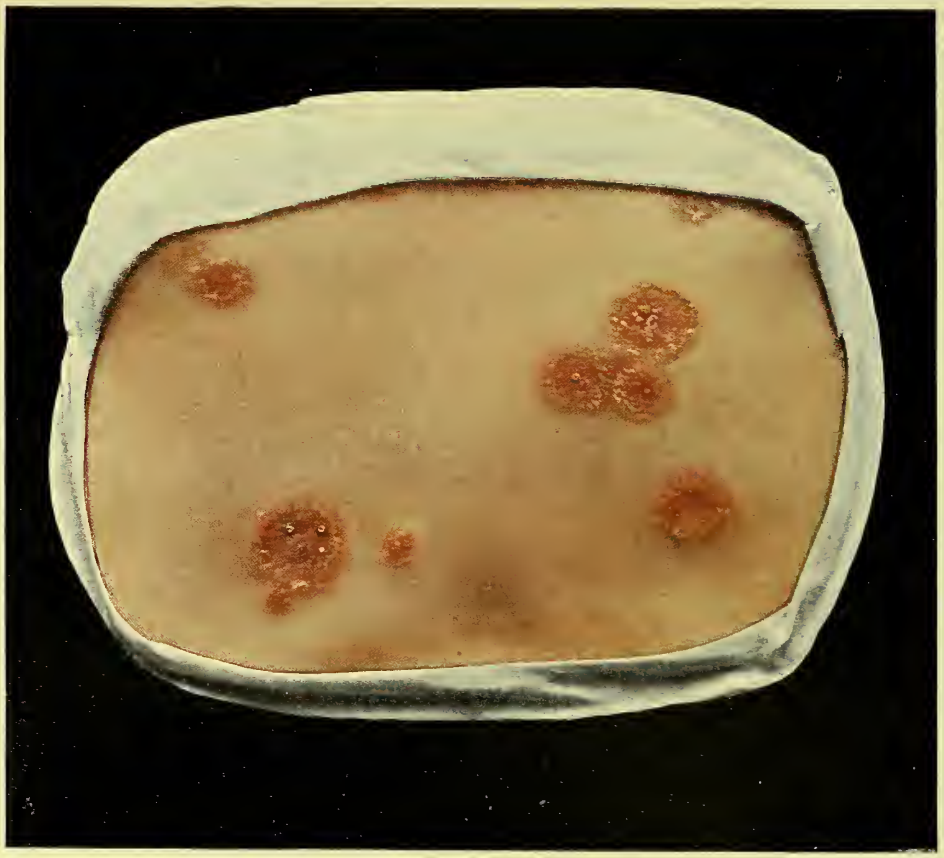
The **Prognosis** is favourable on the body, but on the scalp it must be very guarded, as permanent alopecia is usually the ultimate result of the disease.

Treatment has for its first object the removal of the scutula, which may be effected by an oil-cap; then energetic epilation must be instituted, and in very extensive cases this may be done by the applica-

tion of the calotte under an anæsthetic. Afterwards regular washing with soap and the subsequent use of chrysarobin, tincture of iodine, sublimate spirit or ointment, or naphthol may be recommended. Tar, ichthyol, and tumenol are used with good success. Treatment by X rays appears to yield excellent results, but must be employed with the greatest caution on account of the risk of X-ray burns.

Figs. 66, 67. Model in Neisser's Clinic in Breslau (Kröner).

No. 66. Favus scutularis.



No. 67. Favus scutularis et herpeticus.

PHOTOMICROGRAPHS
OF
PARASITIC SKIN FUNGI

DESCRIPTION OF PLATES

PLATE Ia.

Fig. 1. Extempore unstained preparation in Liquor potassæ of a hair from the scalp of a child affected with **Common Small-spored Ringworm**, by Dr. Arthur Whitfield.

Note the sheath of closely packed small spores arranged in mosaic fashion and eroding the cuticle of the hair.

Fig. 2. Extempore unstained preparation in Liquor potassæ of a hair from the scalp of a child affected with **Common Small-spored Ringworm**, by Dr. Arthur Whitfield.

Note the terminal fringe of mycelium in the shaft of the hair beyond the point where the spore sheath stops short at the neck of the hair-bulb. To obtain this characteristic picture very careful extraction of the hair for examination must be exercised.

Fig. 3. Extempore unstained preparation in Liquor potassæ by Dr. H. G. Adamson of a hair from the scalp of a child affected with the **Large-spored Endothrix Ringworm**, which comparatively rarely occurs in this situation in England. The case was of the type commonly described as 'black-dot,' in which the affected hairs are stubbly and curled up, and are scattered sparsely in small groups over the scalp, rather than in patches like common small-spored ringworm.

Note the chains of spores lying inside the hair and the integrity of the cuticle.

Fig. 4. Extempore unstained preparation in Liquor potassæ by Dr. H. G. Adamson of a hair from the **Beard** of a man affected with **Large-spored Endothrix Ringworm** of that region. The appearances are similar to those in Fig. 3, but the mycelial chains inside the hair are somewhat larger, perhaps owing to more prolonged soaking in Liquor potassæ, in order to determine with absolute precision the variety of the trichophyton.

Note the position of the fungus inside the hair-shaft and the integrity of the cuticle.

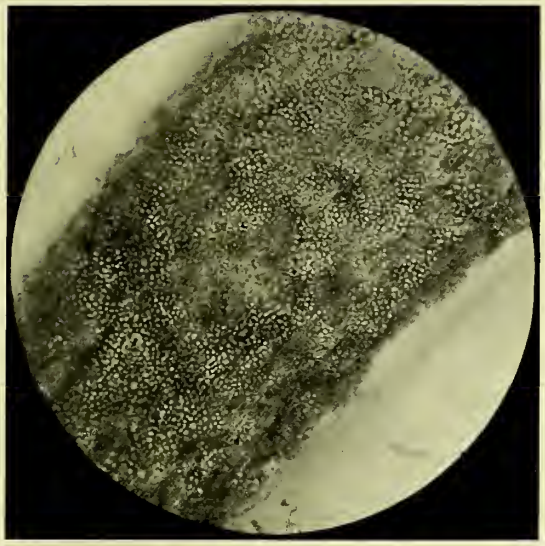


Fig. 1. Small spored Ringworm of Scalp, x 250.

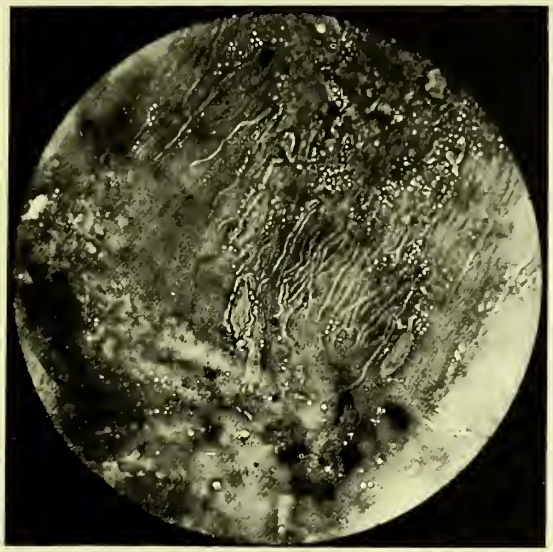


Fig. 2. Small spored Ringworm of Scalp—Mycelial fringe, x 250.

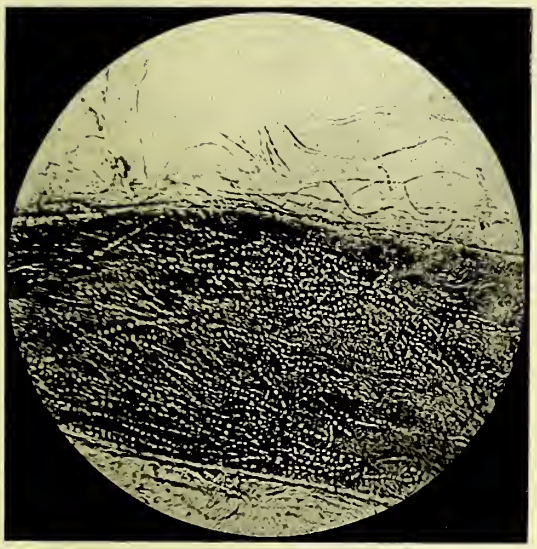


Fig. 3. Large spored Endothrix Ringworm of Scalp, x 250.

Fig. 4. Large spored Endothrix Ringworm of Beard, x 250.

PHOTOMICROGRAPHS OF PARASITIC FUNGI.

Fig. 5. Extempore unstained preparation in Liquor potassæ by Dr. H. G. Adamson of a hair from the **Beard** of a man affected with the **Large-spored Ecto-Endothrix Ringworm** of that region. The mycelial chains, made up of broad elements, are, perhaps, somewhat swollen by imbibition owing to prolonged soaking in liquor potassæ in order to show clearly the relationship of the fungus to the hair.

Note the presence of coarse mycelial chains lying outside, and in various directions across the hair, as well as among the surrounding epithelial cells; the cuticle is invaded and longitudinal strands of mycelium are also visible inside the hair.

The case was clinically characterized by much Kerion, and was doubtless of animal origin.

Fig. 6. Extempore unstained preparation in Liquor potassæ by Dr. Arthur Whitfield of a scraping from a patch of **Ringworm of the Trunk** in an adult (Tinea circinata). From the size of the mycelial elements it is much more probably an endothrix than a microsporon — which is, however, capable of producing lesions of very similar clinical appearance — but the point could only be positively determined by cultures.

Note the intersecting mycelial chains.

Fig. 7. Unstained preparation in Liquor potassæ by Dr. Arthur Whitfield, after several hours' soaking, of a scraping from a case of **Large-spored Ringworm of the Nails**. The fungus is always an endothrix, yielding either acuminate or violet cultures, and the disease generally co-exists with endothrix invasion of either scalp or beard.

Note the broad mycelial chains lying at various depths in the thickness of the nail-substance.

Fig. 8. Large mycelium of a Trichophyton from a case of **Ringworm of the Groins** and adjacent parts, from a typical example of **Dhobie Itch** contracted in India.—J. J. P. The disease is identical with the 'Eczema marginatum' of older writers, and with 'Tinea cruris,' of which the writer has observed several epidemics in communities in Great Britain. The specimen was stained by Adamson's method to expedite diagnosis, as the fungus is, in the writer's experience, sometimes rather 'shy' in potash preparations. Successful cultures have been obtained by Sabouraud on his 'milieu d'épreuve,' which establish the fact that the trichophyton is of distinct type. It is a curious fact that it never invades hairs in the parts affected (pubic regions, axillæ).

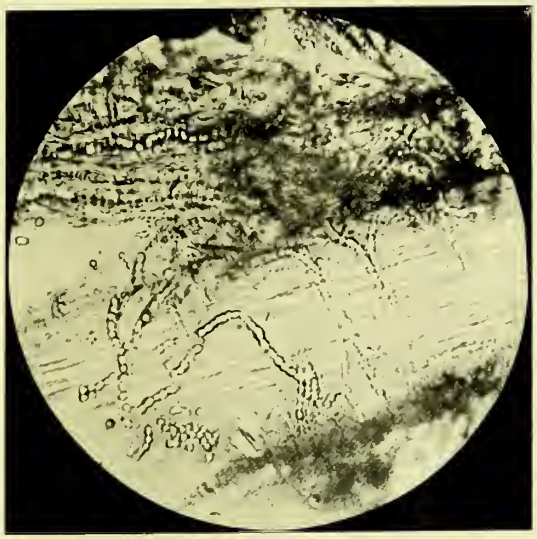


Fig. 5. Large spored Ectothrix Ringworm of Beard, x 250.

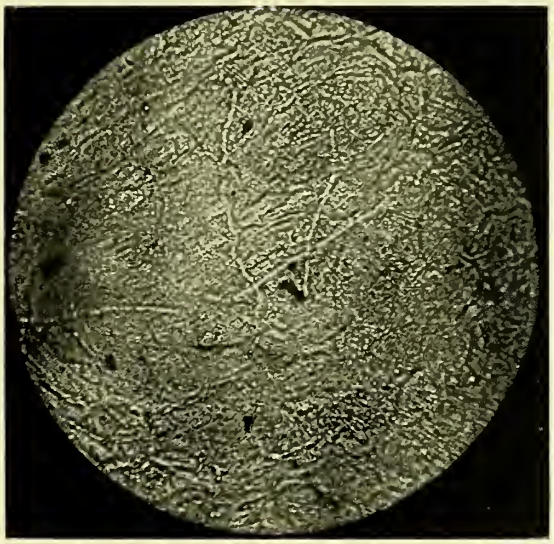


Fig. 6. Mycelium of Ringworm of Body, x 250.

Fig. 7. Large spored Ringworm of Nail, x 250.

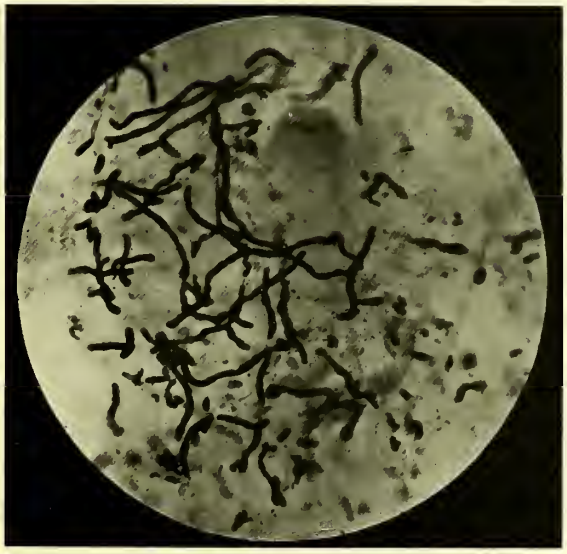


Fig. 8. Stained Mycelium of Ringworm of Groin (Dhobie Itch), x 250.

PHOTOMICROGRAPHS OF PARASITIC FUNGI.

PLATE IIIA.

Fig. 9. Extempore unstained preparation in Liquor potassæ by Dr. Arthur Whitfield of a hair from the scalp of a child affected with **Favus**, and exhibiting the mycelial chains of the *Achorion Schönleinii* lying entirely inside the hair-shaft. The fungus spreads to the hair from the surrounding epithelium in a manner analogous to that which obtains in ringworm.

Fig. 10. Extempore unstained preparation in Liquor potassæ by Dr. Arthur Whitfield of a characteristic sulphur-yellow cup of **Favus** of the trunk, almost entirely composed of a dense fret-work of intersecting chains of short mycelial elements of the *Achorion Schönleinii*.

Fig. 11. Extempore unstained preparation in Liquor potassæ by Dr. Arthur Whitfield of the spores and mycelium of *Microsporon furfur*, from a case of **Pityriasis Versicolor**.

Note the clumps of small round spores, with short oblong mycelial elements in the background.

Fig. 12. Stained preparation by Dr. Arthur Whitfield of the *Microsporon minutissimum*, from a case of **Erythrasma**, under a high power.

Note the extremely delicate mycelial filaments lying among the epithelial cells, some presenting clubbed extremities.

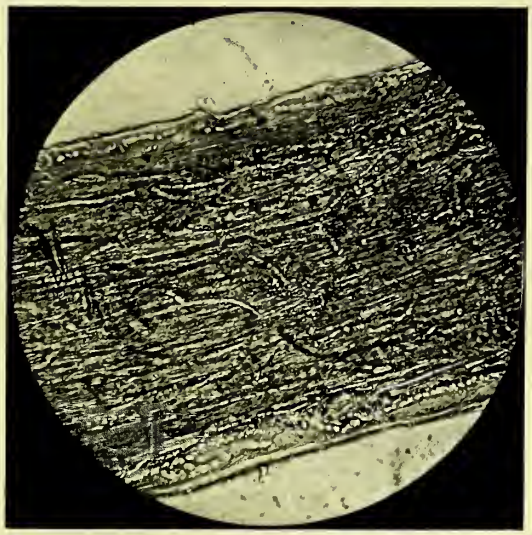


Fig. 9. Mycelium of Favus in Hair, x 250.

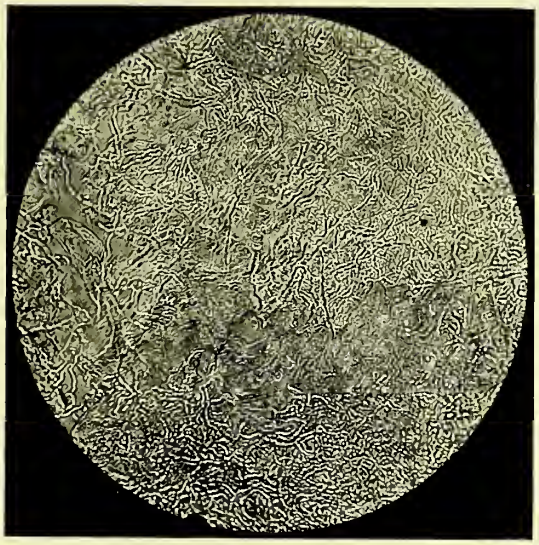


Fig. 10. Mycelium of Favus in Scutellum, x 250.

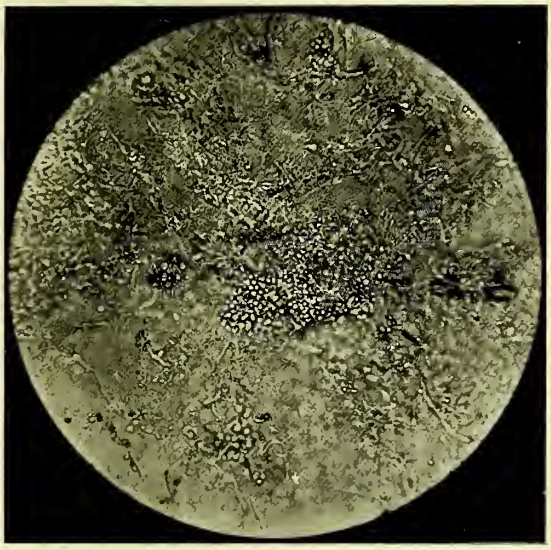


Fig. 11. Spores and Mycelium of Pityriasis Versicolor, x 250.

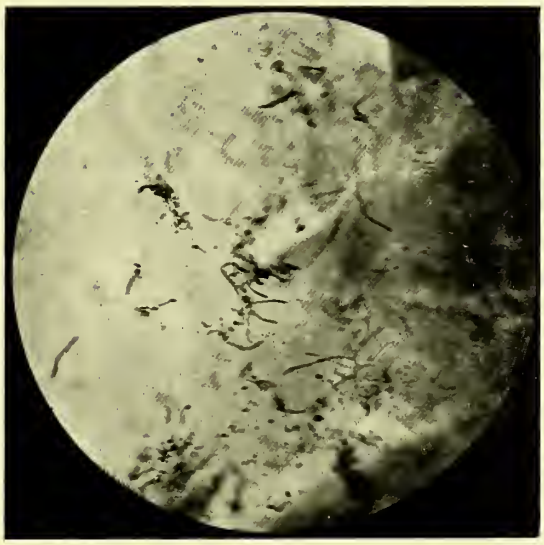


Fig. 12. Stained Mycelium of Erythrasma, x 1000.

PHOTOMICROGRAPHS OF PARASITIC FUNGI.

Psoriasis Vulgaris.

Plates XXXVII.-XLI., Figs. 68-76.

By Psoriasis we understand a chronic, nearly always incurable disease of the skin, the cause of which is unknown—but is very probably of fungous nature—and in which relapsing outbreaks of eruption alternate with intervals of more or less freedom. The primary lesions are typical and consist of small points, the size of a pin's head, which soon become covered with firmly adherent scales. As they develop and spread, all the different forms of *Psoriasis guttata* (Fig. 68), *nummularis*, etc., arise; when healing occurs in the centre, *Psoriasis annularis* results, and when neighbouring circular patches run together the condition is called *Psoriasis gyrata vel figurata* (Fig. 70). The localization, chiefly on the extensor sides of the extremities and on the scalp (Fig. 71), is characteristic of psoriasis, as is the production of small, punctiform, bleeding points in the exposed, moist, red and shiny rete Malpighii, after the scales are rubbed off. Lastly, the absence of any dense infiltration is typical, in contradistinction to other similar diseases, especially scaly syphilides. Deviations from the general rule as to distribution occur, however, not infrequently, and there is no part of the skin which may not occasionally be the seat of the eruption (Fig. 75). Even on the palms and soles psoriasis may exist (Fig. 76), not only in universal attacks, but also in localized cases, so that

it is highly desirable to discontinue the use of the name *Psoriasis palmaris et plantaris* as designating papulo-squamous syphilides of the palms and soles. Mucous membranes are hardly ever involved in psoriasis. The so-called "psoriasis" of the mucous membrane of the mouth has no relationship to true psoriasis, and is better named *Leucoplakia.*

Very marked changes may be observed in the extremely chronic course of psoriasis without any treatment, a circumstance which greatly prejudices our judgment as to the value of all therapeutic measures. Frequently eczematous complications occur. Considerable differences may be observed not only in the shape and size, but also in other attributes of the psoriatic lesions; thus the characters and thickness of the scales vary greatly, and thick mortar-like or oyster-shell-like masses may be present side by side with comparatively thin scales; while all shades of colour may coexist, from a pure glistening mother-of-pearl white to a dark, grayish-yellow or gray tint (Figs. 68, 69, 74). In the same way the intensity and width of the red band which bounds the scales vary; sometimes it is of a yellow rather than a red colour, while on dependent parts a more livid tint may predominate.

The seats of predilection are, as already stated, the backs of the elbows, fronts of the knees and the scalp, but in other cases the disease is much more widely distributed and may involve the greater part of the integument. In acute cases scarcely any region may remain unaffected, and in these circumstances severe general symptoms may develop, whereas in localized cases the general health is unaltered. It is a universally recognized fact that the subjects of psoriasis, which predominates in the male sex, are generally robust, well-nourished individuals. In the chronic

No. 68. Psoriasis vulgaris guttata et ostracea.

No. 69. Psoriasis vulgaris.

No. 70. Psoriasis gyrata et serpiginosa.

forms trifling itching is, as a rule, the only subjective symptom present, but in acute and extensive outbreaks a troublesome feeling of thirst is often complained of.

The involvement of the nails (Figs. 72, 73) ought also to be mentioned, the nail substance becoming thickened, opaque, brittle, split, and often raised from the nail-bed. In severe attacks the nails may be completely shed.

The **Prognosis** is so far favourable that only in exceptional cases is there any deterioration in the general health, and individual eruptions can be cured. A definite, final cure of psoriasis is, however, impossible.

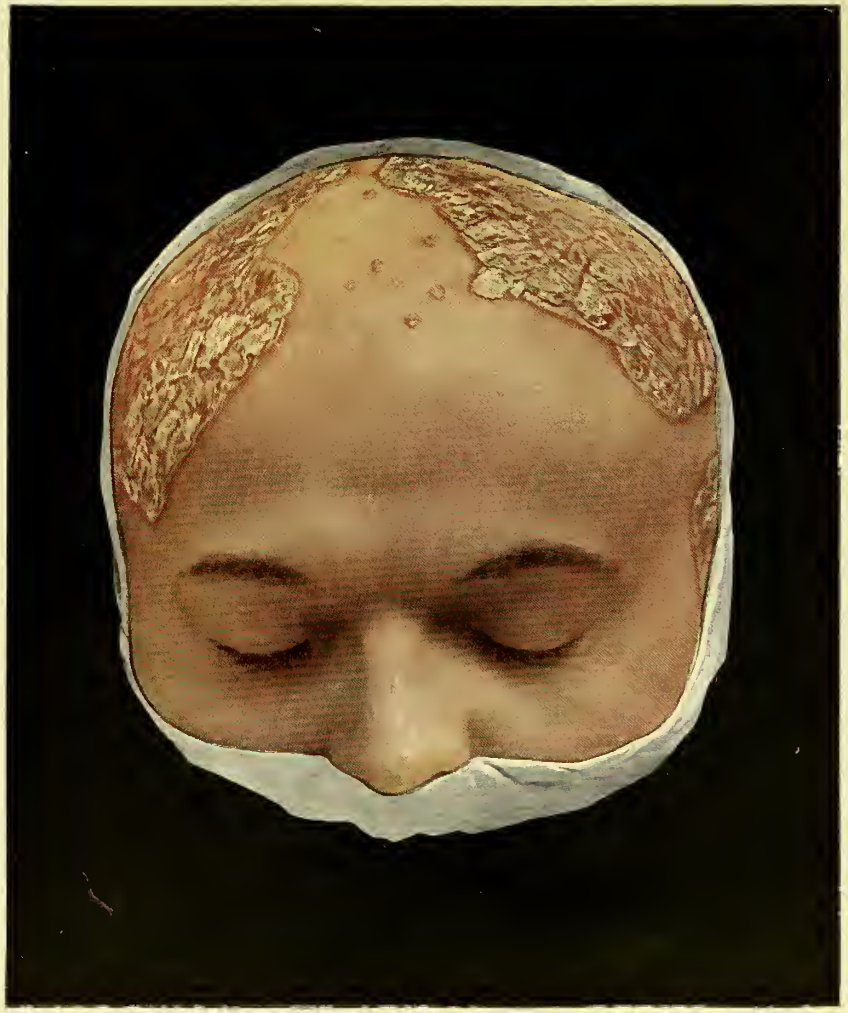
Differential Diagnosis.—Syphilis, eczema seborrhoicum, lupus erythematosus, true eczema and ringworm must first be considered.

Ringworm may be eliminated by the more intense itching, the absence of fungus and its acuter evolution. In contradistinction to lupus erythematosus, psoriasis never leaves scars, and does not invade sebaceous follicles. Eczema seborrhoicum corporis (*Lichen circumscriptus* of Willan) generally displays smaller and more fatty scales with brighter yellowish-red coloration, and its typical distribution is on the chest and back. The differentiation from simple eczema is more difficult, chiefly because combinations of the two maladies occur. As a rule the localization and the fact that true psoriasis never weeps, as well as the determination of the elementary lesions of either disease, suffice to establish a diagnosis. Syphilis most frequently attacks flexor surfaces, and its papulo-squamous lesions—which only need to be considered here—are accompanied by dense infiltration. In syphilis, too, itching is absent; but in dubious cases the

effects of treatment, whether positive or negative, will be decisive.

Treatment may be either by internal—including subcutaneous—or external means. The most important internal remedy is arsenic, which, if properly employed, almost always brings about the recovery of psoriasis spots, but with deep pigmentation. It may be used in the form of 'Asiatic pills,' or of subcutaneous or intramuscular injections of the liquor sodii arsenatis. Iodine is not so certain a remedy, but is efficacious in a number of cases, provided it is prescribed in the form of iodide of potassium and in full doses. Other drugs (thyroid gland, etc.) have been proved to be uncertain in action or quite futile.

The first object of external treatment is the removal, after maceration, of the scaly masses. Baths, soaping and washing, salicylic ointment and superfatty soaps, alcohol sprays or compresses, or simple inunction of fats, with frequent ablutions, soon produce the desired effect. Reducing and slightly irritating remedies must be applied after the removal of the scales. Chrysarobin stands in the first rank, and may be used in the form of weak ointments (2 to 5 per cent.) once or twice daily until slight irritation of the skin is caused. As the drug varies greatly in quality and consequent effect, it is well to use only preparations which, after prolonged use, cause some degree of dermatitis, which we believe to be essential for the removal of the eruption. Chrysarobin ought not to be used for the face and scalp, on account of the ugly discoloration of the skin and hair it produces, as well as of its irritating effect on the conjunctiva. If chrysarobin irritation sets in, or even threatens to do so, the remedy must be at once discontinued and



No. 71. Psoriasis vulgaris capitis.

No. 72. Psoriasis vulgaris unguium.

treatment by indifferent soothing ointments, pastes or tars substituted, until it subsides. Chrysarobin stains the normal skin a dark-bluish or brownish-red colour, in the midst of which the diseased parts appear pale, and chrysarobin staining only disappears when recovery is complete. The drug may be applied to localized spots dissolved in chloroform (10 per cent.), traumaticin being afterwards painted over them.

Pyrogallol produces similar, but not such satisfactory, results; it may be employed in the form of a 5 per cent. ointment, but ought never to be used over more than one-fifth of the surface of the body at a time, on account of the risk of poisoning.

Tar is employed, principally in the form of tar baths, tar oil or tincture of tar, and is specially recommended for psoriasis of the scalp. Similar but milder in its action is the liquor carbonis detergens, which is applicable to uncovered parts, owing to its slight smell and colourlessness. A 10 per cent. white precipitate ointment, to which 10 to 20 per cent. of liquor carbonis may be added, is in common use for the treatment of the face.

Specially obstinate psoriasis spots often disappear under eugallol — a pyrogallol derivative — which is applied mixed with 2 parts of acetone, and covered with zinc paste or dusting-powder. It can, however, only be used for single small patches.

Old obstinate psoriasis patches may be quickly cured by X rays applied until slight redness is produced, and radium acts in a similar way.

Extensive superficial eruptions may be advantageously treated with the mercury (uviol) lamp.

Regular hot baths with sulphur, ordinary warm-water bathing or hot-air baths, help other treatment; sea-baths are often deleterious. If eczema is present,

it must first be cured before the treatment of the psoriasis is undertaken.

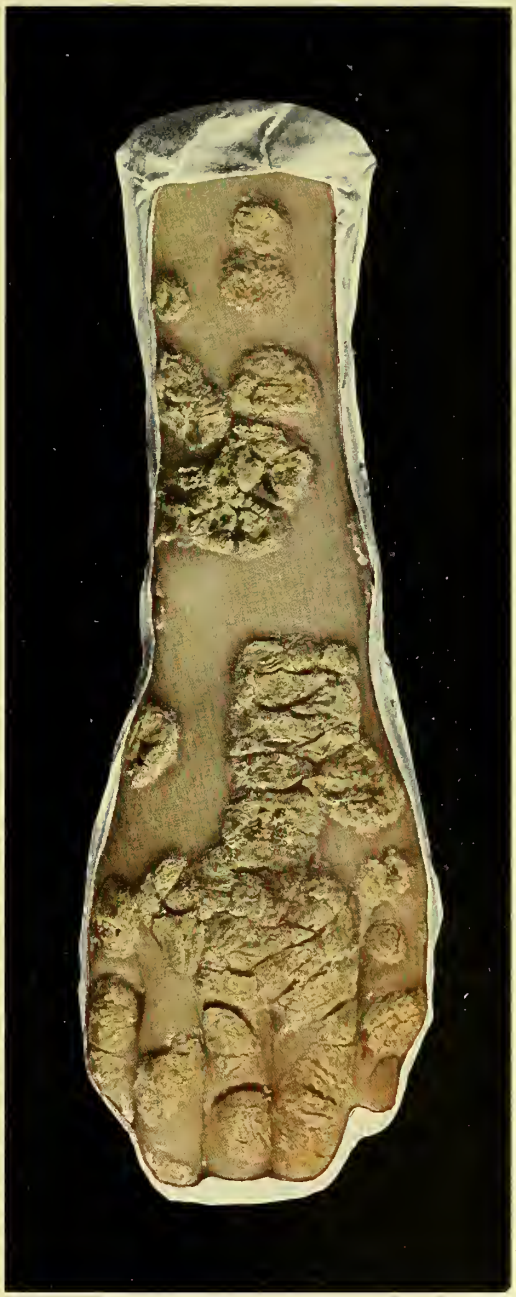
Fig. 70. Model in Lesser's Clinic in Berlin (Kolbow).

Figs. 68, 69, 71, 72, 73, 74. Models in Neisser's Clinic in Breslau (Kröner).

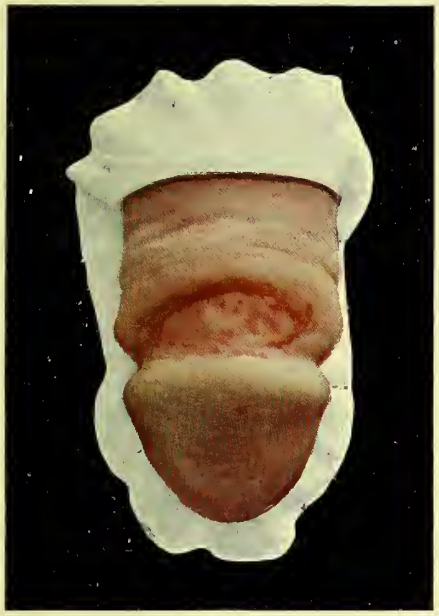
Fig. 75. Model in the Saint Louis Hospital in Paris (Baretta). Du Castel's case, No. 1670.

Fig. 76. Model in Neisser's Clinic in Breslau (Kröner). A man, thirty-four years of age who, in the course of a rather extensive eruption, had manifestations on the palms and soles.

No. 73. Psoriasis vulgaris unguium.



No. 74. Psoriasis vulgaris rupioides.



No. 75, 76. Psoriasis vulgaris.

Lichen Planus.

PLATES XLII., XLIII., XLIV., FIGS. 77-81.

Under the term Lichen are included those diseases the primary lesion of which is represented by a small papule which undergoes no further development. Properly speaking, therefore, only two affections come into consideration — viz., *Lichen ruber planus*, and *Lichen acuminatus*. The latter is a very rare disease, first observed by Hebra, in which numerous red, pointed papules occur, tipped by horny caps, which may run together to form rough, grater-like patches. As the disease spreads the nails are involved, the hair falls, and the earliest described cases proved fatal, with all the characteristics of a severe general malady. It is uncertain whether this type of disease still exists, or whether its serious results are now warded off by the arsenical treatment introduced by Hebra.

The great majority of lichen cases now observed are examples of Lichen planus, the elementary lesions of which consist of minute papules, sometimes as large as a hempseed, but occasionally larger; they are waxy-looking and shiny, and of bright-red colour; they are generally smooth on the surface, accurately delimitated and polygonal (Fig. 77), while sometimes they are crested with a firmly adherent tiny scale. When numerous papules run together the skin presents peculiar, quadrilateral patches. Involution is accompanied by deep pigmentation, and often begins in the centre, while the process spreads at the margin, so

that the skin assumes the appearance of shagreened leather. Intense itching is the most prominent subjective symptom; it gives rise to scratching and thus to narrow linear bands, which appear to be made up of lichen papules in close apposition. Lichen papules also may exist, arranged in the most diverse manners, sometimes being in rings, or in net-like patterns, or in circles (*Lichen annularis*, Fig. 79). After long duration a peculiar warty appearance may be assumed, especially upon the legs (*Lichen verrucosus*, Fig. 80). The disease, which is a very chronic one, generally occurs in successive outbreaks, and disappears very slowly, sometimes leaving atrophy of the parts previously occupied by papules (*Lichen atrophicus*, Fig. 78). The affection is frequently localized on the flexor surfaces of the extremities (Fig. 77), but any part of the body may be attacked, even the mucous membranes (Fig. 81), on which the lesions appear as whitish, silvery, glistening patches with thickened epithelium. Their occurrence on the penis is noteworthy, either alone or in conjunction with a generalized eruption. Very rarely lichen papules become vesicular or bullous.

The **Etiology** of lichen is not yet definitely established, but many exciting causes of vegetable nature (fungi) have been assumed to exist.

The **Diagnosis** can be made without any difficulty if typical lichen papules are present.

The **Differential Diagnosis** must first be made from the small papular syphilide—sometimes unfortunately called *Lichen syphiliticus*—which may, however, be distinguished by the coppery colour characteristic of syphilitic eruptions, by the absence

No. 77. Lichen planus.

No. 78. Lichen planus atrophicus.

of itching, and by the presence of concomitant manifestations of syphilis. When large tracts of skin are involved by lichen, difficulties may arise as to diagnosis from psoriasis; but in the latter disease there are no typical lichen papules and none of the scratch-mark phenomena described, whereas the typical, large, mother-of-pearl-like lamellar scales are present. The diagnosis may be difficult when the soles and palms are involved, as lichen causes large callosities in these situations. The primary lesions must, therefore, be looked for and the existence of itching considered in establishing a diagnosis between lichen on the one hand and ichthyosis or psoriasis on the other.

The **Prognosis** is, on the whole, favourable, but relapses and recrudescences are not infrequent during treatment. Fatal cases of Lichen acuminatus of Hebra are no longer observed.

Treatment.—Most important is the internal administration of arsenic, either in the form of 'Asiatic pills,' or by subcutaneous or intramuscular injection of the liquor sodii arseniatis; but recovery only sets in after comparatively large doses have been administered. The first object of external treatment is to allay itching by the use of tarry applications. Permanent zinc glyco-gelatine dressings allay itching and promote absorption of the papules. Chrysarobin, pyrogallol, mercurial plaster, or Unna's sublimate and carbolic acid plaster-mull, act well in combination with warm baths. X rays and other forms of light treatment—especially ultra-violet light—are often of great use in obstinate cases.

Figs. 77, 79. Models in Saint Louis Hospital in Paris (Baretta). Hallopeau's cases, Nos. 1398, 1554.
Figs. 78 80. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 81. Model in Lassar's Clinic in Berlin (Kasten).

Leucoplakia.

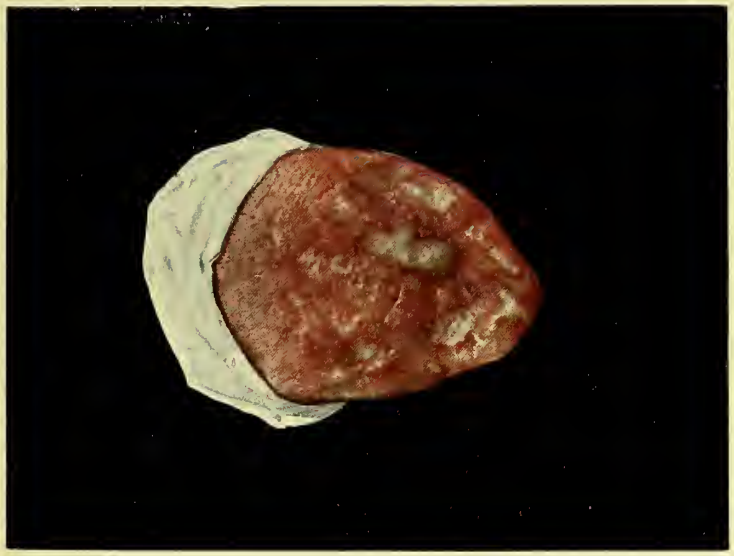
PLATE XLIV., FIG. 82.

On the tongue, especially at the margins, on the buccal mucous membrane in contact with the teeth, at the angles of the mouth, and on the mucous lining of the lips, roundish, often confluent patches are frequently present, especially in persons who smoke and drink to excess, over which the epithelium is thickened and opaque. They pursue an extremely chronic course, they are slightly, if at all, raised, and exhibit little or no inflammation at the edge. In many cases there is a history of antecedent syphilis, but the affection can certainly not be regarded as specific, inasmuch as it also occurs in non-syphilitic subjects, and is absolutely uninfluenced by anti-syphilitic treatment. Epithelioma may develop on leucoplakial patches as the result of long-continued irritation. There is usually very little pain.

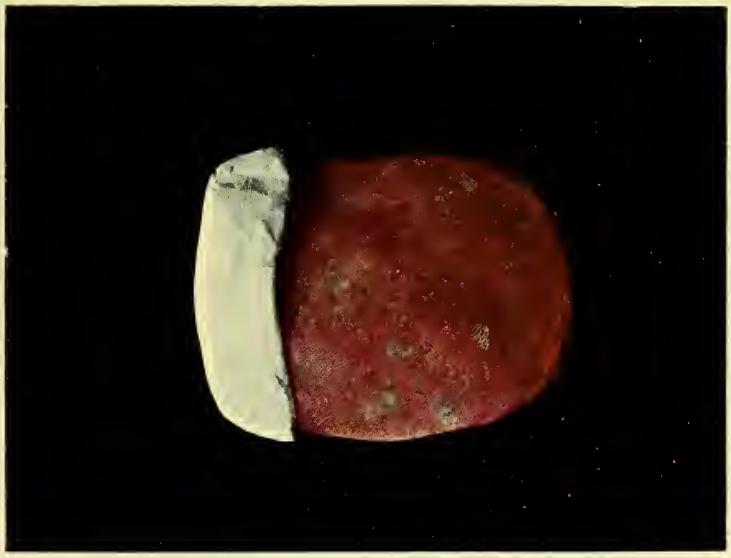
The **Diagnosis** is easy in typical cases, as the long duration, the localization and the absence of inflammatory phenomena permit of easy distinction from syphilitic plaques. Lichen planus of the mucous membrane of the mouth is always accompanied by lichen elsewhere. The 'geographical tongue' is congenital, and soon alters in character.

No. 80. Lichen planus verrucosus.

No. 79. Lichen planus annularis.



No. 82. Leukoplakia linguae.



No. 81. Lichen planus linguae.

The **Prognosis** is, on the whole, favourable, except in the rare cases in which carcinoma develops on a leucoplakial basis.

Treatment can only be followed by good results in the early stages. Apart from local treatment by chromic and lactic acids, papayotin or salicylic alcohol, lotions of decoction of bilberry are recommended. Obviously, smoking and indulgence in alcohol must be interdicted.

Fig. 82. Model in Saint Louis Hospital in Paris (Baretta). Fournier's case.

Exfoliatio Areata Linguæ.

Geographical Tongue.

Plate XLV., Fig. 83.

In this disease there appear upon the tip and marginal portions of the tongue—without apparent cause—grayish-white, sometimes yellowish, round spots which extend rapidly in crescentic lines enclosing somewhat depressed, smooth areas of mucous membrane of a brighter and deeper red colour than the other parts of the tongue. The margins, which are made up of thickened epithelium, measure from $\frac{1}{2}$ to 3 millimetres in breadth, and spread in crescentic segments; but they do not cross the middle line, and only exceptionally invade the lower aspect of the tongue. Decorative, festooned, and geographical figures result from the confluence of contiguous patches and the appearance of fresh rings in the centre. Gradually the central portions become paler and resume their normal characters; the whitish margins disappear, and the diseased parts heal without scarring, but the process of cure may be delayed for months or even years by the occurrence of repeated exacerbations.

Subjective symptoms are usually slight, and consist of a certain amount of oversensitiveness, but sometimes severe pain is observed.

The affection occurs most frequently in children, and

recovery generally takes place at the age of four or five years. In adults the duration of the disease is unlimited. Its cause is absolutely unknown, but in some cases hereditary predisposition has been definitely established.

The **Diagnosis** is easily made by the observation of the typical, rapidly spreading rings surrounding intensely red areas of mucous membrane. Syphilitic mucous patches are not of so deep a red colour ; their epithelium, as a rule, is not dullish white at the margin only ; they are painful, often deeply eroded, and do not change their form so quickly ; finally, they disappear under antisyphilitic treatment.

Leukoplakia of the tongue exhibits a permanent picture without recent inflammatory phenomena.

The **Prognosis** is so far favourable, as the condition does not produce severe symptoms ; but the outlook is dubious as regards cure in adults.

No effectual form of **Treatment** is known ; only temporary benefit can be attributed to the remedies recommended, which include lotions of decoctions of camomile or bilberry, solutions of boric acid, common salt, chloride of potassium, as well as caustic applications of lactic acid, chromic acid, nitrate of silver, and other similar substances.

Fig. 83. Model in Saint Louis Hospital in Paris (Baretta). Meureman and Ramond's case, No. 2235.

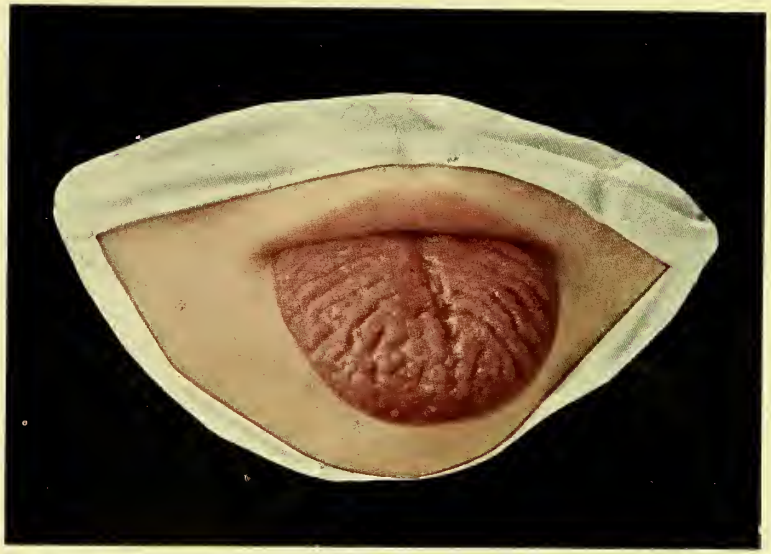
Lingua Scrotalis.

PLATE XLV., FIG. 84.

The 'scrotal tongue' derives its name from its resemblance to the scrotum when contracted by cold. It is a congenital and usually hereditary affection in which the mucous covering is proportionally too extensive to correspond exactly to the body of the tongue, and appears to be arranged in numerous branching longitudinal and transverse folds. Often these folds are arranged like the veins of a leaf (Fig. 84). Local irritation—*e.g.*, by the decomposition of the remains of food in the depths of the furrows—may cause some degree of local superficial inflammation, but otherwise the condition is of no consequence.

Fig. 84. Model in Freiburg Dermatological Clinic (Johnsen).

No. 83. Exfoliatio areata linguae (Geographical Tongue).



No. 84. Lingua scrotalis.

No. 85. Aphthae.

Aphthæ.

Supplement, Plate VII., Fig. 172.

The name Aphthæ (*Stomatitis aphthosa*) is employed to connote roundish or oval patches of whitish colour with narrow, red margins which occur in the mouth either as a subacute or acute condition, in the latter instance being accompanied by the symptoms of a general infection. They attack more especially the lips, the tongue, and the gums, but also the hard and —more rarely—the soft palate. By their confluence they may assume irregular forms, and may attain much greater dimensions. They may give rise to considerable pain, especially as the result of eating; and they heal in two or three weeks, unless repeated exacerbations occur. Analogous eruptions sometimes attack the female genital organs. Symptoms of general stomatitis are usually present in the more severely febrile cases. The disease occurs most frequently in children during teething, but cases of obstinately recurrent aphthæ are of not unfrequent occurrence in adults.

Aphthæ are very probably caused by various excitants of bacillary nature, and disturbances of digestion or decayed teeth are favourable concomitants for their operation.

The **Diagnosis** is usually easily made by considering their acuteness of outbreak, their localization,

Aphthæ.

For ' Supplement, Plate VII., Fig. 172,' *read*
' Plate XLV., Fig. 85.'

and their typical course. Patients who have previously suffered from syphilis have a great tendency to regard aphthæ as recurrences of their syphilitic trouble, and are often accordingly greatly distressed by them.

The **Prognosis** is generally favourable ; but there is no known remedy which prevents recurrences.

The first point in **Treatment** is to order as non-irritating a dietary as possible. In cases where nutrition is interfered with by the pain of eating, this may be combated by painting with cocaine or powdering with orthoform, anæsthesin, and similar substances. Bathing the parts with camomile tea or very weak solutions of boric acid, peroxide of hydrogen, acetate of aluminium, or permanganate of potassium are also employed. Touching with concentrated solutions of nitrate of silver or with sulphate of copper may hasten the healing process.

Fig. 85. Model in Dr. Max Joseph's Polyclinic in Berlin (Kolbow).

Stomatitis Mercurialis.

Plate XLVI., Fig. 86.

The absorption of mercury into the system may take place as the result of its prolonged or free medicinal administration, or by workers in the course of their industrial occupations, and salivation along with softening of the gums at their alveolar margin is its immediate consequence. If the introduction of mercury is not at once stopped, very painful ulcers covered with dirty deposit form on the gums and contiguous parts of the buccal and labial mucous membranes, and on the edges of the tongue, and these impart an offensive odour to the breath. In severe cases the teeth may fall out, and in place of each a very deep ulcer with necrotic slough may result. The general health is seriously impaired by pain and the incapacity to take a sufficient amount of food, in addition to the antecedent symptoms of mercurial intoxication, such as diarrhœa, etc. Imperfect attention to the hygiene of the mouth and the presence of carious teeth are predisposing causes to the occurrence of mercurial stomatitis.

The **Diagnosis** can be made without difficulty from the characteristic ulcers, their localization and a consideration of their causal agent.

The **Prognosis** is generally favourable, although dubious in exceptionally severe cases.

Treatment.—Prophylaxis is the most important point; all bad teeth must be removed before mercurial treatment is instituted; patients during treatment and workers in quicksilver must practise the most careful cleansing of the mouth, using weak antiseptic and astringent mouth-washes, such as acetate of aluminium or chlorate of potash solutions, as frequently as possible. Should ulcerative stomatitis supervene, the ulcers may be anæsthetized by cocaine, then cauterized with a strong solution of sulphate of copper or nitrate of silver with hydrobromic acid or 10 per cent. chromic acid. Painting with balsam of Peru or perhydrol (pure peroxide of hydrogen) also acts favourably. The mouth should be cleansed as frequently as possible with weak solutions of mercuric chloride, permanganate or chlorate of potash, peroxide of hydrogen, tincture of myrrh, or stronger solutions of tincture of rhatany. Local anæsthetics, such as cocaine, anæsthesin, orthoform, etc., may also be employed to enable the patient to take liquid nourishment to which his diet may be limited for a prolonged period, while narcotics and hypnotics cannot be avoided when pain is extremely severe.

Fig. 86. Model in Finger's Clinic in Vienna (Dr. Henning).

Dyschromia Gingivæ Saturnina.

Blue Line on Gums from Lead Poisoning.

Plate XLVI., Fig. 87.

An extremely characteristic and early recognizable symptom of lead-poisoning occurs with special frequency among compositors and house-painters, as well as among other artisans who come in contact with lead. It consists of a bluish-black discolorization of the gums, especially where they lie in contact with and between the teeth, and is due to the deposition of sulphide of lead in the tissues. In some cases stomatitis with fœtid breath and thickly coated, swollen tongue also occur.

The **Diagnosis** is easily made from the typical symptoms; confusion with black deposits on the teeth, which occur in smokers and are visible through the semi-translucent gum, can be differentiated by inserting a strip of white paper under the margin of the gum.

No special **Treatment** can be advocated for the condition. Prophylaxis is all-important, and consists in obviating all risk of the absorption of substances containing lead by the breath or the digestive tract.

Fig. 87. Model in von Bergmann's Clinic in Berlin (Kolbow).

Lichen Simplex Chronicus.
(Vidal.)

PLATE XLVII., FIG. 88.

The affection termed Lichen simplex chronicus of Vidal (*Neurodermitis* of Brocq, *Dermatitis lichenoides pruriens*) attacks the neck, the inner sides of the upper parts of the thighs, the flexures of the knees and elbows, the peri-anal region, and more rarely, the lateral aspects of the abdomen; it must be distinguished from true lichen. Violent itching occurs in situations where at first there are few or no demonstrable changes, so that the patients are compelled to scratch and thus produce a diseased condition which, at its maximum of intensity, shows a central, lichenified area of gray or grayish-brown tint, surrounded by a brighter zone, in which more or less numerous, small, slightly scaly and generally scratched, lichenoid papules are present. The disease is extremely chronic and is more frequent in women than in men.

The **Diagnosis** in fully developed cases is easily made from the localization, the chronic course and the absence of marked inflammatory phenomena.

Treatment of the most prominent symptom is best accomplished by the use of tarry or chrysarobin ointments. Itching may be relieved or dispelled by the application of a firmly adherent salicylic-soap plaster or of a zinc-glycogelatine dressing. General treatment with arsenic is entirely useless.

Fig. 88. Model in Neisser's Clinic in Breslau (Kröner).

No. 86. Stomatitis mercurialis.

No. 87. Dyschromia gingivae saturnina (Blue line on gums from lead).